

annual report

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# SIXTH ANNUAL REPORT

OF THE

# STATE BOARD OF HEALTH,

OF THE

# STATE OF RHODE ISLAND,

FOR THE YEAR ENDING DECEMBER 31, 1883,

AND INCLUDING THE REPORT UPON

## BIRTHS, MARRIAGES AND DEATHS IN 1882.



PROVIDENCE, R. I.

E. L. FREEMAN & CO., PRINTERS TO THE STATE.

1884.



### MEMBERS

OF THE

### RHODE ISLAND STATE BOARD OF HEALTH.

DECEMBER 31, 1883.

HENRY E. TURNER, M., D. Chairman	.NEWPORT COUNTY.
DAVID SMITH	. Washington County.
ALBERT G. SPRAGUE, M. D.	KENT COUNTY.
GEORGE W. JENCKES, M. D	PROVIDENCE COUNTY.
THOMAS H. SIIIPMAN, M. D.	BRISTOL COUNTY.
SAMUEL M. GRAY, C. E.	PROVIDENCE COUNTY.
CHARLES H. FISHER, M. D., member ex-officio and Secretary	PROVIDENCE COUNTY.



To the Honorable the General Assembly of the State of Rhode Island:

Herewith is respectfully presented the Sixth Annual Report of the State Board of Health, in compliance with sec. 9, chapter \$3, of the Public Statutes.

The Report is for the year ending December 31st, 1883, and presents in part the general proceedings of the Board and the work performed under its supervision; and is wholly included in the report of the Secretary, which will be found in the following pages, and is respectfully submitted.

HENRY E. TURNER, Chairman.

Chas. H. Fisher, Secretary.

April 3rd, 1884.

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LAWS IN RELATION TO REGISTRATION.

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- " FROM TOWN CLERKS.

CATTLE COMMISSION.

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### REPORT OF THE SECRETARY.

Gentlemen of the Board:

I have had occasion heretofore, at the regular meetings of the Board, during the year, to give an account of the progress of work performed in the various departments of executive labor assigned to me.

It is, therefore, necessary at this time to make a brief allusion only to the recorded proceedings of the Board, and to present in form for publication, such part of the completed work of the Secretary for the year, as shall seem to have the most general interest for the public and for sanitarians.

In the records of proceedings at the different meetings, are found the action of the Board in regard to various questions and propositions; that is, as to the issuance of circulars, to town councils in relation to a town ordinance requiring returns of death before burial of the decedent, and the giving of burial permits, also in relation to sanitary work of a public character in the towns; to town clerks in relation to proper registration of vital statistics, and of public sanitary improvements in the towns, and in relation to contagious diseases among domestic animals; to physicians in relation to prevalent diseases, the restriction of contagious diseases, and other sanitary suggestions; also, as to the investigation of alleged sale of milk from diseased cows; of the sale of immature yeal; of nuisances reported dangerous to the public health; of the pollution of rivers and wells,

and of other subjects appertaining to individual and general sanitation.

To all the questions and matters alluded to, the Secretary has given, as you are already aware, his attention and labor to the full number of hours of daily official duty.

In the Department of Vital Statistics, the report upon the registration of births, marriages and deaths in 1882, will be found more extended than any since the commencement of registration in the State.

The tabular statements made up from the monthly reports of physicians, of most prevalent acute diseases, are compiled with very considerable labor, and are much more complete than those of any other State in the American Union.

The collated annual reports of physicians and of clerks of local boards of health (town clerks), throughout the State, gives as usual a concise summary of the diseases of most importance prevailing at different seasons during the year, the public sanitary improvements in the towns, and change of public sentiment and advance of individual interest, if any, in regard to measures for the preservation of health.

In the department relating to contagious and infectious diseases among domestic animals, the report will show the progress made in eradicating the disease called glanders in horses, and will present other matters of interest in relation to measures in operation for the restriction and prevention of some infectious diseases of formidable character, now threatening the safety of bovine animals throughout the entire country.

In compliance with a resolution passed by the Board at a meeting held April 5, 1883, "requesting the Secretary to make a sanitary examination of summer hotels and larger public boarding houses at several places of summer resort, for the purpose of ascertaining their sanitary condition; that is, their surroundings in relation to outhouses, stables, privy vaults, cesspools, stagnant water, accumulations of refuse, etc., the source and quality of water supply, especially drinking water, the ventilation, the drainage and sewerage, the man-

ner of removal of excretæ, garbage, and all house refuse, and the facilities for egress or exit in case of fire," the Secretary made such examinations, a report of which will be found under the title of "Inspection of Summer Hotels."

All of which is respectfully submitted.

CHAS. H. FISHER, Secretary.

### MEDICAL CORRESPONDENTS, R. I.

1883.

Dr. M. P. Arnold,

" H. Arnold,

" D. H. Batchelder,

" C. H. Barnard,

" W. J. Burge,

" A. B. Briggs,

" E. G. Carpenter,

" J. S. Chipman,

" G. L. Church,

o,, \_\_, \_\_,

" E. P. Clark,

" H. C. Crandall,

" J. H. Eldridge,

" R. P. Eddy,

Dr. A. H. Eccleston,

" D. M. Edwards,

" G. R. Fisher,

" F. B. Fuller,

" L. F. C. Garvin,

" C. A. Gould,

" C. H. Hadley,

" G. B. Haines,

" G. A. Harris,

" G. W. Jenckes,

" E. A. Kemp,

" D. O. King,

" M. J. E. Legris,

Dr. L. D. McLean,

" A. A. Mann,

" W. C. Monroe,

" A. Potter,

" F. A. Rankin,

" T. H. Shipman,

" A. G. Sprague,

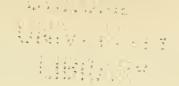
" F. B. Smith,

" W. J. Smith,

" E. P. Stimson

" H. E. Turner

" John Winsor.



### REPORT ON THE REGISTRATION

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# BIRTHS, MARRIAGES AND DEATHS.

IN THE

### STATE OF RHODE ISLAND.

FOR THE

YEAR ENDING DECEMBER 31, 1882.

ALSO

COMMENTS UPON AND COMPARISONS OF THE SAME EVENTS FOR VARIOUS PERIODS FROM 1852 TO 1883.

BY CHARLES H. FISHER, M. D.

STATE REGISTRAR OF VITAL STATISTICS.

TABLE

# GENERAL ABSTRACT OF BIRTHS, MARRIAGES AND DEATHS,

IN THE STATE OF RHODE ISLAND DURING THE YEAR

1882.

1		п	Average Age i	55.50 31.49 44.28	39.31	40.16 40.22 60.62 87.28	39.73	70.60 65.00 86.20 84.61 83.56	40.10	36.43
		ri s	A etresite A first to site to	3,691 3,144	7,390	3,414 2,011 970 6,002	12,397	353 1,300 181 450 1,163 1,242	4,693	10,675
		rage Age years.	Females.	73.00 40.48 43.81	43.33	38.86 36.93 66.50 39.70	39.59	72.00 70.70 23.80 36.75 29.42	41.23	38.41
1		Average Age in years.	Males.	38.00 27.41 44.77	34.83	45.12 45.15 58.67 34.89	39.89	70.25 59.30 32.50 31.20 36.60 35.56	39.06	34.60
8	. 1	egate 1 yrs.	Females.	365 2,348 1,577	4,290	1,982 1,108 366 3,176	6,532	707 1119 1119 764 353	2,309	5,416
	DEATHS, 1882	Aggregate Age in yrs.	Males.	1,343 1,567	3,100	1,432 903 704 2,836	5,865	281 593 156 399 889	2,383	5,259
100.7	ATH	cs en.	Females.	36.55	06	E848	165	100000000000000000000000000000000000000	20	141
1 5	DE	Ages Given.	Males.	35	68	8.12 8.13 8.13	147	40000000	61	152
		TAGE.	Foreign	30	2.0	13	104	10.00	25	137
		PARENTAGE	Аттегісап.	e3=	113	25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	211	9321-185 1931-185	16	160
		-	Females.	36.55	66	33 8 4 8	166	100000 E	57	143
		SEX.	Males.	~ <del>4 %</del>	89	8233	149	40 80 80 80 80	63	154
		°I.°	Whole Numbe	107 177	188	87 51 16 161	315	39 H - 18 0 0	119	208
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3	, 188	ITY.	Am. Male. For, Female.	. co es	13	:03 -A	19		[ <u>:</u>	16
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	MAKKIAGES, 1882.	2	American.	∞ 85 85 ∞ 85 85	53	25 1 29 1 39	116	800 800 110	55	2.0
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			Kor. Father.	14	21	17	33	1 1 1 1 7	4	49
		PAGE.	Am. Father, For. Mother,	1001	30	20.00	30		4	50
000	28%	PARENTAGE	Foreign.	973.6	101	39 16 185	171	: : 4 - 8 5	30	191
1	72°	취	American,	8 57.15	107	801 108	230	4188214	194	211
	B116THS, 1882.	ڼ	Females.	12 76 44	133	11138	216	4000 8 TO	65	212
Ϊ,	_	SEX.	Males.	15 67 45	127	42 31 10 155	238	16 18 17 17 17 39	26	254
		."1	Дроје Дишре	14.8 89 89	359	105 58 270	454	4 11 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	162	501
		.08	Population, 18	1,359 6,028 4,007	11,394	4,519 2,887 1,018 12,164	20,588	459 1,302 1,139 1,979 2,505	8,487	15,693
		TOWNS	AND DIVISIONS OF THE STATE.	Barrington. Bristol.	BRISTOL COUNNY	Coventry East Greenwich West Greenwich Warwick	Kent County	Jamestown. Little Compton. Middletown. New Shoreham Portsmouth	Towns, Newport Co.	NEWPORT CITY

	τ	Average Age in Jears of all.	1	31.83	31.88	25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	52.01	10 10 10 10 10 10 10 10 10 10 10 10 10 1	20 22
		Aggregate Age Ila to strov	8, 156 9 95 95 95 95 95 95 95 95 95 95 95 95 9	52,367	71,473	28.55.55.55.55.55.55.55.55.55.55.55.55.55	9,880	5.38 5.38 5.38 5.38 5.38 5.38 5.38 5.38	168,874
	verage Age in years.	Females.	23.52 23.52 23.53 23.53 23.53 24.53 25.53	31.88	33.58	25.55 25.55 25.55 26.53 26.53 26.53	11.68	82 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	12,51
	Average A	Males.	20.97 20.97 20.59	28.74	30.01	48.86 39.36 41.10 36.77 56.77 56.77 56.77	39,05	25 25 25 25 25 25 25 25 25 25 25 25 25 2	31 33
	Aggregate Age in yrs.	Females.	1,28% 1,420 1,420 1,420 1,420 1,420 1,420 1,420 1,420 1,617 1,617 1,617 1,617 1,617 1,617 1,617 1,617 1,617 1,617 1,617 1,627 1,628	28,915	39,025	3851388 8	4,960	84.7.7.9 84.7.7.9 87.9 8	91.16
3, 1882	Aggre Age ii	Males.	1,208 3,591 1,208 1,208 1,213	23,452	32,418	28 8 8 9 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	1,920	5.855 5.855	77.125
DEATHS,	* #	Females.	**************************************	829	1,162 3	8-1898-18	119	881 881 881 8 81	2,571 7
DE	Ages Given.	Males.	8825 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	816	1,080	21000000000000000000000000000000000000	126	¥ = \$ \frac{1}{2}	2.171
	FAGE.	.ngisro4	######################################	987	1,277		330	82828	2,645
	PARENTAGE	American,	28.4522238322485	62.9	965	F12223	208	3155 E 8	5 150
	SEX.	Females.	88 106 119 119 118 118 118 118 118 118 118 118	811	1,162	# 1	119	88888	2,5%
	v.	Males.	000 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8.25	1.080	415% Ex	12%	& 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	100
	.T2	Whole Zumb	2022 2022 2022 2022 2022 2022 2022 202	1,666	2,212	222222	75	215 215 2108 2108 2108	5,071
~i		For, Male,	1-04 ::: 3: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2:	33	117	: : : : : : : : : : : : : : : : : : : :	7	お知田豊々	E 5
1885	Prv.	Am. Male. For, Female.	म्लाकेच समक स्मालास	7.5	137		50	**************************************	27
GES	NATIVITY	Foreign.	2 - 2 - 1 - 2 - 5 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	230	305		£-	88286	1120
MARRIAGES,	z	American,	E372507372053758	För	616	5-5255	166	251 251 250 250 250 250 250 250 250 250 250 250	1.548
MA	taa	Whole Xnmb	<u> </u>	811	1,172	# # # # # # # # # # # # # # # # # #	180	22222	2,631
		For, Father, Am. Mother,	**************************************	210	25.00 20.00		25	<u> </u>	610
	AGE,	Am. Father. For Mother.	8865 : 148 - 47 7 7 2 4 2	151	155	= :0x x = :0	02	88558	127
35	PARENTAG	Foreign.	\$2.2.5.4 : X 2.1.2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,078	1,110	1 .772.53	1-	EERGE	1 L L L L L L L L L L L L L L L L L L L
8, 1882	PA	American,	441383888855588	182	1,146	2952577	313	ESESE ESESE	2,915
SHETHS,		Females.	84 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1,094	1,350	報は報告388	25	88888	3,316
	×	Males.	82882828282388888888888888888888888888	1,132	1, 638	233622	100	<b>在製造景觀</b>	3,5/9
	,T.	Whole Zumb	118 128 128 128 128 128 128 128 128 128	3,226	2	TARKERE.	135	25222	6,845
_	*088	Population, 18	7, 11, 12, 13, 13, 14, 15, 15, 15, 15, 15, 15, 15, 15, 15, 15	93,017 2,226	104,857 2,788	1,117 1,810 2,952 3,946 5,111 6,101	55,195	11.08 20.58 10.58	976,531 6,845
	TOWNS.	AND BIVISIONS OF THE STATE.	Burrilville Cranson Cumberland East Providence Gloucester Gloucester North Providence North Providence North Providence Smithfield Sciluate Smithfield Woonsorket	Towns, Prov. Co	PROVIDENCE CITY	Charlestown. Exerce. Hopkinton North Kingstown Richmond. Westerly.	WASHINGTON CO.	Cot NTD-8. Reid Neul Newton Newton Providence Washington	WHOLE STATE

Table II.—BIRTHS, 1882.

Arranged by Months, Sexes, and Divisions of the State.

				DIV	VISION	IS OF	THE ST.	ATE.	
MONTHS.	SEX.	Whole State,	Bristol County.	Kent County,	Newport County, Towns.	Newport City.	Providence County, Towns.	Providence City.	Washington County.
January	Males	287	7	22	8	25	96	113	16
	Females	252	6	14	6	23	84	105	14
	Total	539	13	36	14	48	180	218	30
February	Males	265	9	15	7	22	78	121	13
	Females	260	13	18	3	22	85	105	14
	Total	525	22	33	10	44	163	226	27
March	Males	278	7	19	5	16	87	123	21
	Females	274	9	18	4	21	76	128	18
	Total	552	16	37	9	37	163	251	39
April	Males	293	9	24	7	14	95	125	19
	Females	263	7	12	5	19	76	121	23
	Total	556	16	36	12	33	171	246	42
May	Males	254	5	17	6	16	91	107	12
	Females	266	9	20	4	17	86	116	14
	Total	520	14	37	10	33	177	223	26
June	Males	288	10	23	7	27	80	122	19
	Females	258	13	14	8	19	84	102	18
	Total	546	23	37	15	46	164	224	37
July	Males	286	18	10	10	17	103	109	19
	Females	279	17	15	5	19	109	98	16
	Total	565	35	25	15	36	212	207	35

TABLE II.—BIRTHS, 1882,—Continued.

				D1V	ISION	s of	PHE STA	TE.	
MONTHS.	SEX.	Whole State.	Bristol County.	Kent County.	Newport County, Towns,	Newport City.	Providence County, Towns.	Providence Chy.	Washington County
August	Males	296	10	30	7	25	104	110	20
	Females	287	16	28	5	16	93	113	16
	Total	583	26	48	12	41	197	223	36
September	Males	304	9	22	12	21	80	135	25
	Females	259	5	23	6	20	86	98	21
	Total	563	14	45	18	41	166	233	46
October	Males	315	15	20	10	25	98	121	20
	Females	310	14	15	7	18	108	128	25
	Total	625	29	35	17	43	206	250	45
November	Males	294	15	24	11	14	103	113	14
	Females	323	13	15	8	27	116	127	17
	Total	617	28	39	19	41	219	240	31
December	Males	349	13	22	1	32	117	133	25
	Females	285	10	24	4	26	91	114	16
	Total	634	23	46	11	58	208	247	41
Whole year.	Males Females Total	3,316	197 132 259	238 216 454	97 65 162	254 247 501	1,132 1,094 2,226	1,438 1,350 2,788	223 212 435

TABLE III.-PLURALITY BIRTHS, 1882.

ARRANGED BY MONTHS AND DIVISIONS OF THE STATE, AND SHOWING THE NATIVITY OF THE PARENTS.

													_	
	Irish father. Scotch mother.		:	:	:	:	:	:	:	:	:	:		
	Irish mother.	1			•	:	•				•			-
	Scotch father.			:	:	:	:	:		:	:	:	:	
	American mother,	:	:	:	:	:	;	:	:	:	:	:	_	i
	English father.	:	:	:		٠	. :	:		•	:	:		
1 2	American mother.	:	:	:	:	:	:	-	:	1	:		:	3
RENT	Trish father.	1:	:	:			•		•		:	*	:	
PAI	Br. Am. father. English mother.		:	•	:		•	:	:	:	:	•		7
THE PARENTS.	- andtot m A asi	1 =		_:						:			<u>:</u>	1 60
OF T	American father, Irish mother,				:	;	:		:	:	:			1 6.5
	Могичедіяп.	1 .			· :		:		:			·	•	<del>! -</del>
NATIVITY	Swedish.	1	-:-		•	:		- :	:-			-:	•	-
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	Сегтан.	:	-:		<u>:</u>	:	•	•	·	•	<u>:</u>		:	-
	Ttalian,	١ .	•			:	•			•		•		
	English.	:		:	:	•	٠	٠	:	:	:	.:	٠	
	British American.	હ	:		:	:			:	•		_ :	:	10
	Irish.		टड	:	:	:	:	टड	જ	7		હડ	4	15
	Аплегісап.	ા	ಣ	:	70	33	-	33	35	ऽऽ	_	4	ಬ	23
	Washington Co.,	-	:	:	:	:	:	-	:	-	:	:	3.5	10
STATE.	Providence City.	35	es.		30	ಣ	-	35	ಣ	35	-	25	5-	50
ne S	Ргочіденсе Со., Точ'яв.	1 00	ಣ	:	_	:	_	ಣ	:	1	3	4	:	18
F T	Newport City.	-	0.5	:	_	:	:	:		:	:	:	:	5
DIVISIONS OF THE	Towns.	:	:	:	:	:	:	_	_	:	:	_	:	30
(810)	Newport Co.,		-:	•		•				-	•		•	1
Drvi	Kent County.	-				- :	÷	•	•		•		•	
'-	Bristol County.	:	*	٠.	0		-	4	0.	5		-	00	1 02
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	×	90	. 20			90	98	. 80	x	. 28	. 20	or.	95	2
	<b>E</b>	Males Females	Males Females.	Males Females	Males Females	Males Females.	Males Females	Males Females.	Males Females	Males Females	Males Females.	Males	Males Females	les
	02	Ma	Ma	Ma	Ma	Ma	Ma	Ma	Ma	Ma	Ma	Ma	Ma	Ma
_	Number of Cases,	5-	5-	7	20	ော	35	5-	<u> 10</u>	<u> </u>	ಣ	5-	<u></u>	61
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	MONTHS				:				:		:			u
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		anuary	February	March	April	May.	June.	July.	August	September	October.	November	December	Whole Year
		Ja	Fe	M.	A	M	Ju	Ju	Aı	Se	06	N	De	

Table IV.—MARRIAGES, 1882.

Arranged by Months and Divisions of the State.

			DIV	ISIONS	OF 7	THE S	TATE.		
MONTHS.	Whole State, 1882.	Bristol County.	Kent County.	Newport County, Towns.	Newport City.	Providence Conaty, Towns.	Providence Čity.	Washington County.	Whole State, 1881.
January	243	13	16	11	10	69	105	19	250
February	197	4	14	1	15	70	82	11	247
March	121	4	10	3	17/	30	55	12	174
First Quarter	561	21	40	15	32	169	242	42	671
April	227	10	14	6	6	72	109	10	227
May	206	2	16	5	9	68	91	15	257
June	221	8	13	2	12	71	101	14	272
Second Quarter	654	20,	43	13	27	211	301	39	756
July	164	7	17	2	10	47	70	11	157
August	179	7	17	1	12	ก <u>ี</u> อี	80	7	188
September	238	6	15	2	13	77	111	14	204
Third Quarter	581	20	49	õ	35	179	261	32	549
October	269	8	15	3	20	79	125	19	276
November	349	8	24	12	15	121	149	20	294
December	220	12	15	11	8	52	94	28	204
Fourth Quarter	838	28	54	26	43	252	368	67	774
Whole Year	2,634	89	186	59	137	811	1,172	180	2,750

Table V.—AGES OF PERSONS MARRIED, 1882.

	AGES OF WOMEN.										alcs			
AGES OF MEN.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	Not Stated.	Whole Number of Males
Under_20	39	15	3											57
20 to 25	266	577	89	7	4	2								945
25 to 30	99	406	267	43	9	2	٠.	1						827
30 to 35	27	113	113	73	18	5	1							350
35 to 40	8	50	39	40	34	6	3							180
40 to 45	1	8	20	27	24	16	4	4	٠.					104
45 to 50	1	3	9	12	16	10	6	1						58
50 to 55		6	4	4	7	7	12	3						43
55 to 60			4	4	3	7	7	1	2					28
60 to 65		1	1	3	ā	1	6	2	ā					24
65 to 70			1			1	3	2		2				9
70 to 75		1						- •	1		1	1		4
75 to 80					1		1			1				3
80 to 85					,		1				1			2
Not Stated		- * * *			:									
Whole No. Fem	441	1180	550	213	121	57	44	14	8	3	2	1		2634

Table VI.—DEATHS, 1882.

Arranged by Months, Sexes, and Divisions of the State.

		,							
				DIV	ISION	S OF	THE STA	ATE.	
MONTHS.	SEX.	Whole State.	Bristol County.	Kent County,	Newport County, Towns.	Newport City.	Providence County, Towns.	Providence City.	Washington County.
January	Males	196	11	11	2	13	67	78	14
February  March	Females. Total. Males. Females. Total. Males. Females. Total. Males.	202 398 179 213 392 196 194 390 193 208 401 191 215 406 171	5 16 6 8 14 5 6 11 8 12 20 7 11 18 6	8 19 14 10 24 12 13 25 10 16 26 18 13 31	4 6 2 1 3 6 5 11 1 4 5 5 3 8 5	9 22 9 15 24 10 9 19 14 7 21 12 11 23 13	61 128 64 67 131 68 70 138 63 70 133 57 71 128	107 185 74 103 177 86 80 166 85 87 172 77 92 169 77	8 22 10 9 19 9 11 20 12 12 24 15 14 29 8
July	Females	208 379 205 205 410 294	$     \begin{array}{c}       6 \\       12 \\       6 \\       5 \\       11 \\       11     \end{array} $	16 23 12 14 26 19	2 7 3 2 5 12	16 29 11 13 24 22	74 129 73 70 143 107	$ \begin{array}{c} 88 \\ 165 \\ 95 \\ 97 \\ 192 \\ 112 \end{array} $	6 14 5 4 9
September.	Females	295 589 225 219	12 23 7 11	19 38 13 14	13 25 7 6	25 47 18 17	104 211 76 73	110 222 85 82	12 23 19 16
October	Total	444 217 182 399	18 8 4 12	27 10 18 28	13 11 8 19	35 13 7 20	149 74 64 138	167 92 73 165	35 9 8 17
November	Males Females Total	229 232 461	10 10 20	7 14 21	$\begin{array}{c} 4 \\ 6 \\ 10 \end{array}$	14 7 21	70 55 125	118 129 247	6 11 17
Décember Whole Year.	Males Females Total	$ \begin{array}{r} 191 \\ 214 \\ 405 \\ 2,487 \end{array} $	4 9 13 89	16 11 27 149	4 3 7 62	5 7 12 154	51 62 113 825	101 114 215 1,080	10 8 18 128
. HOLD I Citl.	Females Total	2,587	99 188	166 315	57 119	143 297	841 1,666	1,162 2,242	119 247

### TABLE VII.—DEATHS, 1882.

Showing the Number of each Sex, in each Period of Life, in every
Town and Division of the State; also the Ratio of
Deaths to Population.

					-			
ţ	Popula	T10N, 1880.	DEA	тнѕ, 18	82.	ar.		
TOWNS  AND DIVISIONS OF THE  STATE.	Whole Number.	SEX.	Per cent. to Population.	Whole Number.	SEX.	Under one year.	1 and under 2.	2 and under 3.
Barrington Bristol	6,028	Males Females Females Males	0.74 1.77 1.77	10 107 71	5 49 58 35	1  14 14 7	1 4 1	1
Warren Bristol County		Females Males Females	1.65	188	36 89 99	4 22 18	6	
Coventry  East Greenwich		Males Females	1.92 $1.77$	87 51	35 52 21	5 13 3	$\frac{3}{2}$	2
West Greenwich		Females  Males  Females	1.57	16	$\begin{array}{c} 21 \\ 30 \\ 12 \\ 4 \end{array}$	2		
Warwick		Males Females	1.32	161	81 80	20 11	2 2	$\frac{1}{2}$
KENT COUNTY	20,588	Males Females	1.53	315	149 166	30 31	5 4	
Jamestown		Males Females	1.09	5	4			
Little Compton		Males Females	1.66	20	$\begin{array}{c} 10 \\ 10 \\ \end{array}$	1;		1
Middletown  New Shoreham		Males Females	0.61 1.08	7 13	2 5 5	1 2 2		
Portsmouth		Females	1.77	35	8 15	1	2	1
Tiverton	2,505	Females Females	1.56	39	$   \begin{array}{r}     20 \\     26 \\     13   \end{array} $	6	4	1
Towns, Newport Co.	8,487	Males Females	1.40	119	62 57	12 8		2
NEWPORT CITY	15,693	Males Females	1.89	297	154 143	27 23	8	

TABLE VII.—DEATHS, 1882.—Continued.

							1						
3 and under 4.	4 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and nuder 60.	60 and under 70.	70 and under 80.	80 and under 90.	90 and over.	Not stated.
1	1 2 1 2	 1 1  2 1 3		3 2	6 4 3 2 9 6	7 6 3 6 10 12	1 2 3 3 3 6 6	 2 5 4 3 6 8	1 2 2 6 4 4 7	1 2 3 9 8 6 12 17	 1 4 2 1 1 5 4	 4 1 2 1 6	
1  1  2 1 3 2	·····  ···  1	1 1 1  3 2 5 3	1  2  2 2 3 4	2 1 2 1 7 4 9	 6 2 2  9 9 11 17	1 1 1 2  5 6 7 9	1 2 1 1 1 1 3 3 6	5 5 2 4 1  11 10 19	3 5 5 4 3 1 5 3 16 13	5 10 1 3 2 2 13 12 21 27	5 4 3 1 3  4 7 15 12	1 2	1 1 1 
1 1 2		2	1 1 1	 1  2 2	1 2 1 1 1 4 3 7	1 1 2 1 2 3	2 3 2	1 1 2 1 2	2 1 2 1  3 1 2 1 9 4	2 1 3 3  1  1 2 4 1 11 7	3 3	1	1 1 1
5	3 4	7 5	2 2	3 4	11 9.	13 9	19 13	10 12	15 11	18 15	6 17	1 2	2 2

### TABLE VII.—DEATHS, 1882.—Continued.

<u> </u>								
	POPULA	TION, 1880.	Dı	еатня, 188	2.	ii ii		
TOWNS  AND DIVISIONS OF THE  STATE.	Whole Number.	SEX.	Per cent. to Population.	Whole Number.	SEX,	Under one year.	i and under 2.	2 and under 3.
Burrillville		Males Females	1.36	78	40 38	12 4	3	$\frac{}{2}$
Cranston	5,940	Males	3.52	209	103	$\begin{array}{c} 10 \\ 17 \end{array}$	2 2	$\frac{2}{2}$
Cumberland	6,445	Females Females	2.11	136	$   \begin{array}{r}     106 \\     69 \\     67   \end{array} $	13 12	7	
East Providence	5,056	Males Females	1.62	82	46 36	13 5		$\frac{1}{2}$
Foster		Males Females	1.03	16	9			
Glocester	2,250	Males Females	0.91	22	13 9	$\frac{1}{4}$		
Johnston	5,765	Males Females	1.28	74	33 41	5 9	2	
Lincoln	13,765	Males Females	1.59	220	101 119	$\frac{29}{17}$	$\frac{14}{6}$	1 4
North Providence.	1,467	Males Females	1.29	19	11 8	2 3		
North Smithfield		Males Females	1.33	41	22 19	11	1	1
Pawtucket	19,030	Males Females	1.84	350	$\frac{190}{160}$		8 8	8
Scituate	3,810	Males Females	1.34	51	$\frac{17}{34}$	2 5	1	1
Smithfield	3,085	Males Females	0.78	24	$\begin{array}{c} 8 \\ 16 \end{array}$	2 3	$\frac{2}{1}$	1
Woonsocket		Males Females	2.14	344	163 181	59 42	14 13	4
Towns, Prov. Co.	93,017	Males Females	1.79	1,666	825 841	221 158	51 40	22 18
Providence City.	104,857	Males Females	2.14	2,242	1,080 1,162	230 186	66 63	31 26
Charlestown	1,117	Males Females	0.63	7	5 2			
Exeter	1,310	Males Females	1.37	18	11	$\frac{3}{1}$		
Hopkinton	1	Males Females	1.35	40	20 20	2		
North Kingstown.	.3,949	Males Females	1.39	55	28 27	5		
South Kingstown.		Males Females	1.11	57	31 26		2	1
Richmond		Males Females	0.77	15	8 7			
Westerly	6,104	Males Females	0.90	55	25 30		1 1	2
Washington Co	22,495	Males Females	1.10	247	128 119		1	

### TABLE VII.—DEATHS, 1882.—Continued.

3 and under 4.	4 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and under 60.	60 and under 70.	70 and under 80.	80 and under 90.	90 and over.	Not stated.
1 1 1 4 1 2 1 2 1 3 2 2 1	2 1 1 3 3 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 3 1 3	1 3 4 2 1 5 4 2 3 6 1 1 3 5 9 2 5 3 3 3 2 1 2 2 4	1 1 1 1 1 2 1 1 2 5 2 5 4 4 17 16 23 22 1 1 1 1 2 1	2 2 2 3 1 2 3 3 1 2 3 3 1 1 1 6 6 3 1 1 1 1 1 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1	1 9 16 9 4 5 4 5 1 1 4 1 12 1 15 1 1 1 2 2 8 18 1 1 1 1 1 2 5 1 1 47 1 1 2 5 1 1 47 1 2 2 3 6	33 177 9 5 10 3 6 13 4 5 15 3 16 13 2 2 7 13 61 76 117 142 3 2 1 2 2 2	99997663 1	8 2 6 12 6 6 2 2 1 1 3 4 4 3 10 1 11 8 3 1 4 9 4 6 5 8 8 9 8 1 1 2 1 2 2 1 1 1 3 1	3 4 9 15 5 4 7 1 2 1 1 1 7 1 5 6 6 1 17 10 6 3 1 3 7 6 6 1 80 101 1 2 1 6 4 4 3 2 1	2 10 10 10 8 6 14 4 4 2 3  6 8 5 15 3  11 12 11 14 68 89 77 100 100 100 100 100 100 100 100 100	3 2 6 8 8 6 6 6 3 5 1 1 5 5 6 6 1 1 1 1 4 4 2 3 6 9 5 8 8 40 48 8 1 1 1 3 3 2 6 6 3 3 3 3 1 1 2 2 4 4 4 6 6 6 6 3 3 3 3 1 1 1 2 2 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2 1 1 3 1 1 3 2 1	
2	4 4		2 5 5	9	$\frac{7}{16}$	$\frac{1}{9}$	13	11 7	15 9	17	13 15	····i	2

TABLE VII.—DEATHS, 1882.—RECAPITULATION BY COUNTIES.

	POPULA	TION, 1880.	Dr	EATHS, 188	2.			
COUNTIES.	Whole Number.	SEX.	Per cent, to Population.	Whole Number.	SS SEX	Under one year.	1 and under 2.	2 and under 3.
BRISTOL Co	11,394	Males Females	1.65	188	89 99	22 18	6	 1
Kent Co	20,588	Males Females	1.53	315	149 166	30 31	5 4	2 4
NEWPORT CO	24,180	Males Females	1.72	416	216 200	39 31		6 5
Prov. Co	197,874	Males Females	1.97	3,908	1,905 $2,003$	451 344	117 103	53 44
Wash. Co	22,495	Males Females	1.10	247	128 119	$\frac{24}{10}$	3 2	3
WHOLE STATE	276,531	Males Females	1.84	5,074	2,487 $2,587$		$\frac{145}{122}$	

TABLE VII.—DEATHS, 1882.—RECAPITULATION BY COUNTIES.

3 and under 4.	4 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 30.	30 and under 40.	40 and under 50,	50 and under 60.	60 and under 70.	70 and under 80.	80 and under 90.	90 and over.	Not stated.
1	1 2	1 3		3 2	9	10 12	6	6 8	7 12	12 17	5 4	1 6	
3 2	· · · · i	5 3	3 4	9	11 17	7 9	6 7	19 19	16 13	21 27	15 12	 3	2 1
5 5	3 4	9 5	3	5 7	14 16	15 12	22 15	12 17	24 15	29 22	12 25	1 3	3
36 38	29 25	61 58	40 38	73 85	196 248	178 218	135 167	135 139	156 162	145 189	79 106	10 29	11 10
2	4 4	1	5 5	9	7 16	9	13	11 7	15 9	17 18	13 15	1	• • • • • • • • • • • • • • • • • • • •
44	37 36	80 76	51 50	94 106	237 303	211 260	182 203	183 190	218 211	224 213	124 162	12 42	18

TABLE VIII.—CAUSES OF DEATH, 1882.

Arranged Alphabetically; showing the Number of each Sex, who died from each cause, in each month and in the whole year 1882; also the Number of American and of Foreign Parentuge, from each cause, for the year.

CAUSES OF DEATH.	Jan.	1	Feb.	Mar.		April.		May.	June,		July.		Aug.	-	Sept.	Oct.	4.5	Nov.		Dec.	LAIR	PARENTAGE		T.	SEN.	
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Accidents (various)	<del>-</del>	5		ಣ		ಣ	_	:	70		4	<u></u>	<del>പ</del>	4	_	က	:	-	_	: ന	 	~	7 36	6 12	<b>2</b> )	<del>1</del> 8
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", Railroad	:		:	_	:	<u>က</u>			_	:	:		:	-	:	က		ന		:			2	9		16
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Asthma	:	:	_	_	:		•		:	:	_	: H	:	:	:	Н	-	·	•			က	9	4		6
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Bones, Disease of.		•	:	:	:		•		_:	:	:		•	:	:	:		•	٠	:		:	-:			_
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Cancer (various)	4. 3.	_	ಣ		ದ	_	35	3	_	<u>~</u>	4	6			9	4	5			3	54	4 31	$\frac{1}{30}$			85
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CAUSES OF DEATH,	J.	Jan.	<b>A</b>	Feb.	M	Mar.	April,	ii.	May.		June		July.	_	Aug.	- ž	Sept.	10	oct.	Z	Nov.	Dec.	-:	PARENTAGE	rage.		7.	SEX.	0
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													-																and an annual

\* Including a death returned in Newport, Sporadic Asiatic Cholera, male, aged seven years, died early in September. This case presented the usual characteristics of Asiatic Cholera.

Table VIII.—CAUSES OF DEATH, 1882.—Continued.

0																											
CAITSES OF DEATH	Jan		Feb.	2	Mar.	April		May.		June.	July.	ly.	Aug.		Sept.		Oct.	Z	Nov.	Dec.	°.	PARE	PARENTAGE.		0.	SEX.	
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TABLE VIII.—CAUSES OF DEATH, 1882.—Continued.

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TABLE IN.—CAUSES OF DEATH, 1882.

Arranged Alphabetically; showing the Number of each Sex, who died from each cause, in each Period of Life.

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Table IX.—CAUSES OF DEATH, 1882.—Continued.

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Callstones	:	:	•	:	:	:	•			:	•		:		• 1			-	:O	:	:	•	•	•			4	4
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Hernia	-	:	•			:	•	:	:	:	:		H	•		-	<u>~</u>	-	:	П	-	_				20	4	Ţ
Hip-Joint, Disease of		•	•	•		es .	•		:	:	_		:	•	•		:		:		:	•	•	:		<u>ස</u>	•	ಣ
Hooping Cough		: 당		1	_		•	• 1	:	:		:	:	•				:	:	:	:	•	:				es es	12
Hydrocephalus	10	3		01.6	25	33	30	35 L	:	:	_	:	:	:	•	:	:	:	:		•	-:		:	3.7		13	49
Thursenza	:	:	•			:	•		:	:				•		٠			:		•	•		:		:	•	-
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Opium rating							•					-	•	-:	-:				:	•	- :	-:	-:	-:	=	:		_

Table IX.—CAUSES OF DEATH, 1882.—Continued.

CAUSES OF DEATH.	Under 1.	1 and under 2.		2 to 5.	5 to 10.	10 to 15.		15 to 20.	5, 3	20 to 30.	30 to 40.		40 to 50.	50 to 60.		0.00	70 to 80.		So and over.	Age not stated	ad.	<u> 20</u>	SEX.	
	M. F.	M.	F. M	E	M. F.	M	F.	M. F.	M.	E	M. 1	F. M	<u>F</u>	M. F	Z.	F.	M. F.	M.	Ė	M.	F4	M. F	. 1	Total.
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Intemperance, Del'm Tr'ms.	•	:	:	:	:	:	:	:	:	:	4	<u>.</u> ت	:	:	:	: 1	<del>:</del>	:	:	:	:	·	• J	£- 1
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Jaundice		•	•	•	•	•	•	•	:	:	•		:	:	_	=	•	•	:	•	•	.5	.5	4
Kidneys, Disease of	;	i	•	•	•	•	•	•	_		4	00 00	4	20	4	ಣ	9	_		•	-	35	2-	43
" Bright's Dis. of	•	:	•	•	•	:	•	<del>-</del>		9	S	4	_	4	5	Н	4	•		·	•	25	6	44
Knee-Joint, Disease of	•	•	•		•	:	•	-	:		•	•	•	•		•				•	•	<u>دج</u>	*:	જ
Laryngitis.				•	•	•	•	•	:	:	•	•	•	€.		•	•	•		•	•	ಸಾ	<b>c</b> 3	₹~
Liver, Disease of	•	:	:	:	-	•	•		_	:	ಣ	60	50	<u>~</u>	5	70	4			:	•	22	63	50
" Inflammation of	•	:	•	•	•		•	•		:	•	7	-	<u>es</u>	•	П	-			•		ī.C	ಣ	œ
Lungs, Disease of		c.s	•		•	:	•	-		cs.	•		П	•	•	-	•	•	_	:	•	20	<u>~</u>	13
Malformations (all kinds).	1011	•	:	:	•	•	•	•	:	:	•	•	•	•		:	•	•		:		0.		21
Malignant Pustule	•	•		•	•	:	•	•	:		•	•	•	•		•	•	-	:	:	•	-	:	_
Marasmus	41 24	-	4	H	•		•	-	_	•	•	•		<u>.</u>	•	•	<u>:</u>	•	:	-		74	31	28
Measles.	-	:	•	4	•	•	•	•	•	•	•	•	•	•		•	•	:	:	:	•	-	20	ဗ
Meningitis, Cerebro-Spinal.	⊗ 4	i	-	જ	<del>ين</del>	_	<del>ن</del>	<u>.</u> ∞	<del>, -</del>	:	•			•	:	•	<u>ः</u>	:		:		4.	4	88
Spinal	∾ 		•	•	•		•	<u> </u>	:		-	-	:	•	:	•	•		:	:	•	4	4	œ
Murder and Homicide	:	•	•	•	•	:	•	•	:	•	टऽ		•	<del>-</del>	:	•		•		:	•	4	<b>C</b> S	9
Neuralgia	•	•	•	•	•	•	•	•	•	•	•	•		÷		•		•	•	:	•	-	:	_
Neglect and Starvation	-	•	•	•	•	•	-	•	•	•	:	•		•	:	•	•	•	:	:	•	-	_	જ
Old Age	:	•	:	•	•	:	•	:	:	•	•	•	:	•	<u>.</u> در	<u>8</u>		9	113	:	-	10 1	<u></u>	283
Paralysis	-	•	•	-	•		•	<del>:</del>	:	•	4	70 4.	9	<u>L</u>	6	0.	5 25	S	2-	છંડ	•	55	60	111
Peritonitis		•	:	_	•		•	·	<del></del>	စ	જ	9	ಣ	•	ಣ	•	<u>:</u>	•		•	•		<u> </u>	30
Pleurisy		-: -:	-:		-:	 -:	-:	-: -:	_	_: _:	 _•	=;	 _:	_	 _:	=;	-:		_	: •	=	<b>.</b> 5	4	9

Table IX.—CAUSES OF DEATH, 1882.—Continued.

	15 20 30 40 40 50 60 70 70 80 and Age not 10 30. to 30, to 50, to 60, to 70, to 80, over, stated,	F. M. F.	1		2 5 6 3 313 5 6 61112141012 210 3 3 136135 271	
The same of the sa	to 5. to 10. to 15.	M. F. M. F. M.			9 1 2 2	
	1 and 2 to 5.	M. F. M. F. M. F.	:	•	7 5 5 8	
-	Under $\lim_{1}$	M. F. M.	:		65 43 7	
	CAUSES OF DEATH,		Uterus, Disease of	Uræmia:	Unknown	Sudden

Table X.—CLASSIFICATION AND PERCENTAGE, 1832.

Showing what part of the Mortality in the whole State, and in each Division is ascribed to each cause and class of causes.

	SECRI	ETARY'S	SRE	EPOF	RT.				35
	Bristol County.	100.00	17.49		18.03 12.57	26.77 4.37	4.92	. 555	10.93
VISION.	Kent County.	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00	15.28			• <	4.51 8.78	69 3.43	
ч басн Di	Newport County, Towns,	100.00	24.14		9.48	4.31	4.31		12.07
PERCENTAGE OF DEATHS IN EACH DIVISION	Zemport City.	100.00	25.19		9.54 12.22	6.87	4.20 3.05	.38	9.92
TAGE OF	Providence County, Towns.	100.00	24.92		13.65		5.24		5-41
Percen	Providence City.	100.00	24.75			, V		.94	
	Washington County.	100.00	21.39		13.95 12.55		4.65 2.33		:
	Percentage in the Whole State.	100.00	23.81		10.82	20.02 5.45	5.85 2.46	.58	.06 5.89 4.91
	CAUSES OF DEATH.	803 Specified Causes.	I. Zymotic Diseases	SPORADIC DISEASES.	H		VI. DIGESTIVE SYSTEM	VIII. (	
	Whole State.	70, 4j	1,143		*	1,	281		283
NOI	Washington County.	247	46		30	00	10	1 4	- 60 60
NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.	Providence City.	2,242	551		179		154	15	2 779 109
DEATHS IN EACOF THE STATE.	Ргоуіденсе Сопиду, Тоулы.	1,666	376		206		75 18	9	106
)EATI	Zewport City.	207	99		85 85 7 70 85 5		Ξ ∞	H m	36
OF I	Zewport County, Towns,	119	28		110	22.20			14.
MBER	Kent Conuty.	315 288	44		36	168	55 x	CS 5~	:25.
Nu	Bristol County.	188	ಜ್ಞ		8 8 8 8 8 8	24	ರ ೧	: -	% 0%

Table X.—CLASSIFICATION AND PERCENTAGE, 1882.—Continued.

	Bristol County.	10.93					
VISION.	Kent County.			1.04		1.04	1.39
EACH DI	Newport County. Towns.	4.31 1.72 9.6	90.	14.65		1.79	1
DEATHS IN	Newport City.	5.34 1.15	1.52	2.67		10	8.89
PERCENTAGE OF DEATHS IN EACH DIVISION	Providence County, Towns.	8.74 8.74 9.10	%. %. L	 		. 20 . 46	1.72 1.72 .06 .40
PERCEN	Providence City.		1.84	1.03 1.03 .63	: :	. 8. . 81	1.79
	Washington County.	6.05	L. ±0.	1.40	.46	6,00	. 46
	Percentage in the Whole State.	.02 6.77 .50	1.87	1.42	.15	.17 .58 4.43	1.48 .02 .12 .58 .03
	CAUSES OF DEATH.	I Carbuncle	0 Diarrhea 1 Dinkfheria	68 Dysentery. 27 Erysipelas.	Fever	8 " Malarial. 28 " Puerperal. 13 " Tvolloid	Hoopin Influen Measles Mening
	Whole State,	ංත 	.00	-			
NOIS	Washington County.	13:	:	·	<u> </u>		
OF DEATHS IN EACH DIVISION OF THE STATE.	Providence City.	130 130 13		233		18 140	40
DEATHS IN EA	Providence County, Towns.	: -	43			w 5- \$ <del>4</del>	28 1 8 9 1
DEATE F THE	Mewport City.	:4 4 co ro			: :	: : 62	9
OF I	Newport County, Towns,	: . 70 ex H	•	17	: :	: : %	
NUMBER	Kent County.	11 : 2	- cc	. ല		: co co	4 :: [
No	Bristol County.	20	-	100	: :	9	

										91
	17.49	:	2.73	4.91		2.19		.55	18.03	1.09 1.64 55
1.04	15.28	•	5.21	1.74	  	69.	69	.35	12.51	3.83 1.74 1.39 1.39
	24.14	•	3.45	3,45	98.	.86	• • •	· · · · · · · · · · · · · · · · · · ·	9.48	4.31 1.73 86 59
6.11 76 1.15	25.19	80 c	1.91 2.67		20 m	1.15	• •	38	9.54	4.20 .38 1.15 3.05
. 06 . 46 	24.92	.26		1.53	04.	1.59	46	40	13.65	.04.1.5 .04.0.5 .05.00.00
.04	24.75			5.2	25.7	1.93	4.1.	.54	8.03	3.99 .49 .81 2.06
. 46	21.39	.93	3.72	1.40	.03	.46	.93	93 94 86 89	13.95	34. 80. 80. 80. 80.
.04 .04 .33	23.81	8. 8.	2.75 2.75 2.69	1.04	£ 4	1.62	80. 80. 80.	.56	10.82	3.21 .60 1.02 1.98 2.29
3 Pyennia. 45 Scarlatina. 2 Small Pox. 16 Syphilis.	Total	II. General or not Localized.	4 Auæmia 132 Cancer 29 Debility	50 Dropsy. 6 Gangrene	Hemorrhage. Malformation.	78 Marasmus	4 l'urpura 11emorrhagica.	27 Thrush	Total	111. Nervous System. 29 Brain, Congestion of. 26 (* Inflammation of. 27 (* Inflammation of. 28 (* Inflammation of. 29 (* Inflammation of. 20 (* Inflammation of. 20 (* Inflammation of. 21 (* Inflammation of. 22 (* Inflammation of. 23 (* Inflammation of. 24 (* Inflammation of. 25 (* Inflammation of. 26 (* Inflammation of. 27 (* Inflammation of. 28 (* Inflammation of. 29 (* Inflammation of. 20 (* Inflammation of. 20 (* Inflammation of. 20 (* Inflammation of. 20 (* Inflammation of. 21 (* Inflammation of.
	1,143	14	133 4 821 129	50	172	7,8	14	8 8 8 8 7 8	520	154 29 49 95 110
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Table X.—CLASSIFICATION AND PERCENTAGE, 1882.—Continued.

		Bristol County.	7.11.	12.57	1.64
	VISION.	Kent County.	6	15.97	.69
	г EACH DI	Newport County, Towns,		16.38	.86
	DEATHS IN	Newport City.	88. 97. 77. 97. 97.	12.22	12.23
	PERCENTAGE OF DEATHS IN EACH DIVISION	Providence County, Towns.		13.92	.46 1.66 14.83 .00
	Percen	Providence City.	41.22.1 46 1.22.1 1.22.1 80	13.48	.04 2.69 .04 .04 .04
1		Washington County.		12.55	1.86
1		Percentage in the $W$ hole State.		13.69	2.08 2.08 .02 15.33 .04
		CAUSES OF DEATH.	Delirium Tromens.  4 Epilepsy. 9 Hydrocephalus. 8 Meningitis, Spinal. 1 Neuralgia. 1 Paralysis. 8 Tetanus and Tris. Nascentium.	Total	IV. RESPIRATORY SYSTEM.  9 Asthma.  100 Bronchitis.  1 Catarrh.  737 Consumption.  2 Dropsy of Chest.  7 Hemorrhage from Lungs.
		Whole State.	28 11	658	10 73
	ION	Washington County.		27	230
	NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.	Providence City.	28 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	301	60 1 351 4
	DEATHS IN EACOF THE STATE.	Providence County, Towns.	15 0 30 30 30	210	
	EATH	Newport City.	· ন র · র · র র	32	
	OF D	Newport County. Towns.		19	
	IBER	Kent County.	: HHH : :8	46	1 8 : 12 : :
	NUN	Bristol Connty.	. H	233	

1883.]		SECR	ETAR	xy's	REP	ORT						39
	26.77	4.37	4.37		•	1.64	• •			.55		4.92
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.86	18.97	4.31	4.31		0 0 0	98.			1.73	• •	1.73	4.31
	22.14	6.87	6.87		9	.76	.38	•	2.67	.38		4.20
	23.92	. 20 3.64	3.84		.40	67.	.13	90.	1.06	. 73 . 73	.73	5.24
.14 .08 .7.63	36.98	.03 .03 7.8.3	6,55			2.42	.0±	.18	1.08	1.08	1.5	6.91
46 8.84 .93	25.59	5.1%	5.12		46	.93		• •	.93	1.40	• • •	4.65
.15 .25 .12 6.77	25.52	.04 .10 5.31	5.45		32.	1.56	.08 .83	.10	1.31	89. 80.	90.	5.85
7 Laryngitis 12 Lungs, Diseases of. 6 Pleurisy 325 Pheumonia Congestion of Lungs	Total	V. CIRCULATORY SYSTEM.  2 Aneurism.  5 Embolism.  255 Heart, Diseases of	Total	VI. DIGESTIVE SYSTEM.	6 Bowels, Diseases of	75 Enteritis.	Gallstones	5 Intussusception	58 Liver, Diseases of	30 Pertonntis	4 Tabes Mesenterica	Total
<u> </u>	1,225		362								~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	381
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Table X.—CLASSIFICATION AND PERCENTAGE, 1882.—Continued.

		Bristol County.	1.09	1.09	* * * * * * * * * * * * * * * * * * *	:	· · · · · · · · · · · · · · · · · · ·
	VISION.	Kent County.	1.04	2.78	69.	69.	. 35
	Percentage of Deaths in each Division.	Newport County, Towns,	5.17	5.17			
	DEATHS IN	Newport City.	.76 .76 1.53	3.05		.38	
	TAGE OF	Providence County, Towns,	90.	1.19		09.	90.
	Percen	Providence City.	.36 .31 2.33 .14	3.18	.82 .09	79.	0. 40. 0.
		Washington County.	1.40	2.33	.46	.46	0 0 0
		Percentage in the Whole State.	.29 .27 1.79 .06	2.46	.39 .06 .12	.58	.00 .00 .04
		CAUSES OF DEATH.	VII. URINARY SYSTEM. Bladder, Diseases of. Diabetes. Kidneys, Diseases of. Prostate, Diseases of. Uramia.	Total	VIII. GENERATIVE SYSTEM. Child-birth Puerperal Convulsions. Uterus, Disease of	Total	IX. LOCOMOTIVE SYSTEM.  Bone, Diseases of  Hip-Joint, Disease of  Knee-Joint, Disease of
		Whole State.	114 13 86 3	118	19	28	
	ION	Washington County.		5			
	DIVIS	Providence City.	1937.38	71	5-83	15	HH8
	OF DEATHS IN EACH DIVISION OF THE STATE.	Providence County, Towns.	110	18	8	6	:
	ЕАТН	Newport City.	. : ಬಯ4 · ·	\omega \tag{\text{\tin}\exititt{\texi}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texitt{\text{\text{\text{\texi}\text{\texi}\text{\text{\texit{\texi}\texit{\texi}\text{\texi}\text{\texitit}\\ \texitit{\t	<b>-</b> : :		
	OF D	Newport County, Towns.	9	9		:	
	NUMBER	Kent County.	or	8	es · ·	65	- : -
-	NUM	Bristol County.		જ			• • •

1883.	]			SEC	RETARY'S REPORT.	41
.55	.55	• •		10.93		3.28
.69	2.43			8.68		4.51
· · · · · · · · · · · · · · · · · · ·	:	· · · · · · · · · · · · · · · · · · ·	:	12.07		5.17
1.15	1.15			9.92	1.53 38 38 38	5.34
.33	99.	90.	90.	7.03		4.97
.36	.94	.04	.09	3.54	71.1 .04 .04 .05 .05 .05 .05 .05 .05 .05 .05	4.88
1.40	1.86	• • • • • • • • • • • • • • • • • • •	•	6.05	1.46 46 93 93 93 94 93	6.05
.39	96.	20.	90.	5.89	00.1 00.1 7.1.8.8.3.3.4.4.0.0.0.4.4.4.0.0.0.4.4.4.0.0.0.4.4.4.4.0.0.0.4	4.91
21 Rheumatism	46 Total	X. Integumentive System. 1Skin, Diseases of.	3 Total	3 XI. OLD AGE.	XII. EXTERNAL CAUSES.  8	36 Total
1 2 2	4	j		3 283	4 H 4 W H 6 % W	3 23
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H :	П			50		9

### TABLE XI.-OCCUPATIONS AND AGES AT DEATH, 1882.

Showing the Average Age at Death in the several Occupations, Providence City being separated from the rest of the State, and ages under twenty being excluded.

	PRO	VIDENCE	CITY.	R	EST OF ST.	ATE.	77	HOLE 'STA	TE.
OCCUPATIONS.	Number who Died.	Aggregate Agc.	Average Age.	Number who Died.	Aggregate Age.	Average Age.	Number who Died.	Aggregate Age.	Average Age.
I. AGRICULTURE.									
Farmers	15 	,	67.60 67.25	149 1 6	62	68.61 $62.00$ $47.33$	1	11,237 $62$ $553$	68.52 $62.00$ $55.30$
		200			201	100	10		00.00
II. PROFESSIONAL AND PERSONAL SERVICES.									
Artists	2		$47.50 \\ 48.00$				2		$47.50 \\ 48.00$
Barbers	4	190	47.50	1	26	26.00	5	216	43.20
Bar Tenders	3	113	37.66	1	61	61.00	3		37.66 $61.00$
Clergymen	3		53.33	5	400	80.00	8	560	70.00
Clerks and Salesm'n. Coachmen	19		$34.32 \\ 49.33$	11	396	36.00	30		34.93 $49.33$
Constables				1	47	47.00		47	47.00
Cooks Dentist	2	50	25.00	1 1		49.00 68.00			$\begin{vmatrix} 33.00 \\ 68.00 \end{vmatrix}$
Hostlers	3	129	43.00	2 3	93	46.50	5		44.40
Hotel Keepers Janitors	2	101	50.50	2		61.00 $37.50$			56.80 $37.50$
Journalist	1	42	42.00				1		42.00
*Laborers Lawyers	155	0,807	$51.56 \\ 36.66$	$\begin{vmatrix} 119 \\ 3 \end{vmatrix}$		52.94 53.66		13,157 271	$\frac{52.21}{45.17}$
Musicians	1	31	31.00	1	47	47.00	2	78	39.00
Music-teacher Photographer	1 1		$\frac{29.00}{47.00}$				1 1		29.00 47.00
Physicians	6	359	59.83	4	297	74.25	10	656	65.60
Policeman	1 1		$\begin{vmatrix} 62.00 \\ 65.00 \end{vmatrix}$		106	53.00	3		$56.00 \\ 65.00$
Saloon-keepers	6	264	44.00	4	193	48.25	10	457	45.70
Stable-keepers Students	2 2		$\begin{bmatrix} 56.00 \\ 23.00 \end{bmatrix}$		183	61.00	5 2		$\begin{bmatrix} 59.00 \\ 23.00 \end{bmatrix}$
Waiters	6	240	40.00	5		38.80	11	434	39.45
Watchmen	4	229	57.25	2	141	70.50	6	370	61.67

<sup>\*</sup> Unskilled labor.

# TABLE XI.—OCCUPATIONS, 1882.—Continued.

	PRO	VIDENCI	CITY.	R	EST OF ST.	ATE.	77	VHOLE STA	TE.
OCCUPATIONS.	Number who Died,	Aggregate Age.	Average Age.	Number who Died.	Акктекие Акс.	Average Age.	Number who Died.	Aggregate Age.	Average Age.
III. TRADE AND TRANSPORTATION. Agents, Insurance. Apothecary. Banker. Book-keepers. Boatman Broker. Butchers. Horse Car Drivers and Conductors. Cashier (Bank, &c.). Expressmen. Fishermen and Oystermen. Grocers. Hackman. Liquor Dealers. Mariners. Merchants. Peddlers. Pilots. Porter. R. R. Employés. Sea Captain. Teamsters. Traders and Dealers.	1 1 1 6 1 1 4 3 1 5 4 6  1 6 1 1 1 6 1 1 1 1 6 1 1 1 1 1 1	45 80 180 56 65 208 84 55 221 226 409  122 489 1,038 184  55 235 66 319	67.00 45.00 80.00 30.00 56.00 52.00 28.00 55.00 44.20 56.50 68.16  40.66 40.75 64.87 46.00 39.16 66.00 39.87 57.06	5 2 1 2 2 2 2	71 	61.00 61.00 68.20 68.00 22.00 53.66 61.22 37.50 66.50 42.00 44.16	1 1 1 1 8 1 1 6 3 1 5 6 2 4 2 5 6 6 2 1 6 6 1 1 1 3 2 2 2	45 80 251 56 65 330 84 55 221 567 545 224 1,133 1,589 259 133 55 235 66	63.56 43.17 66.50 55.00 39.16 66.00 40.69
IV. MANUFACTURES, MECHANICAL AND MINING INDUS- TRIES, Bakers. Belt-maker. Blacksmiths. Bleacher. Block-printer. Boiler-makers Boot and Shoe-makers. Box-maker.	4  6 1 1 2	311 61 65 103	38.50 51.83 61.00 65.00 51.50	1 8  1 5	35 395 68	68.00 73.40	1 14 1 1 3	35 706 61 65 171 445	35.60 35.00 50.43 61.00 65.00 57.00 74.17 65.00

# TABLE XI.—OCCUPATIONS, 1882.—Continued.

	PRO	VIDENCE	CITY.	R	EST OF ST	ATE.	V	VHOLE STA	TE.
OCCUPATIONS.	Number who Died.	Aggregate Age.	Average Agc.	Number who Died.	Aggregate Age.	Average Age.	Number who Died.	Aggregate Age.	Average Age.
Broom-maker. Builders. Calico-printers. Carpenters. Carriage-maker Cigar-makers Confectioner Coopers. Dyers. Engineers Engravers. File Cutters. Gas Fitters. Harness-makers. Hatter. House Mover. Lithographer. Jewelers and Chasers Machinists. Manufacturers. Masons. Mechanics Millers. Millwrights Miner. Moulders and Foundrymen. Operatives. Overseer Painters and Varnisher Pattern-makers. Paper Hangers Plumbers.	2 188 1 1 1 1 1 2 3 3 3 3 1 1 300 7 13 4 14 155 1 132 1 2 1 2 1 2 2	102 52 388 66 75 151 32 125 155 1,292 1,339 463 846 204  619 568 60 530 122 56 96	51.00 46.22 52.00 38.00 66.00 37.50 50.33 32.00 41.66 51.66  32.00 66.13 66.13 66.13 65.07 51.00  44.21 37.86 60.00 40.77 61.00 48.00	1 · · · · 4 30 · · · · · 2 2 2 2 2 2 2 2 2 2 2 2 2 1 5 6 6 2 2 1 1 4 4 4 0 4 4 1 4 · · · · · · · · · · · · · · · ·	203 1,716 	26.00 	1 2 4 4 4 4 8 1 1 3 1 1 3 3 4 4 5 5 5 5 5 1 1 1 1 1 1 3 9 4 8 8 1 1 0 2 2 1 1 1 1 8 5 5 5 5 5 2 7 2 2 2 2	26 102 203 2,548 52 1177 66 221 187 215 151 183 209 103 32 63 2,255 1,074 1,730 517 133 147 35 721 2,277 325 1.217 122 127 96	26.00 51.00 50.75 53.08 52.00 39.00 66.00 73.66 46.75 43.00 50.33 36.60 41.80 51.50 32.00 63.00 28.00 41.49 46.98 67.12 61.78 51.70 66.50 73.50 35.00 40.06 41.40 65.00 45.00 45.00 46
Pork Packer. Printers. Rigger. Roll Coverer. Rubber-worker. Sail-makers.	1 3 1 1 1	124 36 27	62.00 41.33 36.00 27.00 54.00	3  6 2	196	56.33 32.66 65.50		293 36 27 250	62.00 48.83 36.00 27.00 35.71 65.50
Sash and Blind Makers.	1	25	25.00	1	49	49.00	2	74	37.00

# TABLE XI.—OCCUPATIONS, 1882.—Continued.

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	PRO	VIDENCE	CITY.	R	EST OF ST	ATE.	V	VHOLE STA	TE.
OCCUPATIONS.	Number who Died.	Aggregate Age.	Average Age.	Number who Died.	Aggregato Age.	Average Age.	Number who Died.	Aggregate Age.	Average Age.
Ship Carpenters Silversmiths Stone and Marble			42.50	2		60.50	2	85	60.50 42.50
Cutters Stucco-workers Tailors Tinsmiths	2 1 6 2	51 360	$   \begin{array}{r}     48.00 \\     51.00 \\     60.00 \\     36.50   \end{array} $	3 1 5 1	61 290	61.00 $61.00$ $58.00$ $52.00$	2	112 650	55.80 56.00 59.09 41.67
Upholsterers Wheelwrights Wood-turners	1 1 1	$\frac{45}{26}$	45.00 26.00 23.00	1 5 2	25 303	25.00 $60.60$ $36.50$	2 6 3	70 329	35.00 54.83 32.00
V. Females. Cigar-maker Clerk House Keepers	1 1 4	24	24.00 24.00 49.25				1 1 4	24	24.00 $24.00$ $49.25$
Dressmakers and Seamstresses Jeweler Milliners Nurses	6 1 2	20	32.66 20.00 27.50	4 2		44.75 69.50	10 1 2 2	20 55	37.50 $20.00$ $27.50$ $69.50$
Operatives	7 14 1 2 1	202 522 40 103	28.85 37.28 40.00 51.50 25.00	22  1 3	650 84	29.54  84.00 51.00	29 14 1 3	522 40 187	29.38 37.28 40.00 62.33 44.50

TABLE XI.—RECAPITULATION BY CLASSES.

	PR	OVIDENCE	CITY.	RI	EST OF ST	ATE.	w	HOLE STAT	E.
OCCUPATIONS.	Number who Died.	Aggregate Age.	Average Age.	Number who Died.	Aggregate Age.	Average Age.	Number who Died.	Aggregate Age.	Average Age.
I. AGRICULTURE.	19	1,283	67.52	156	10,569	67.75	175	11,852	67.72
II.Professional and Personal Services	210	10,179	48.47	171	9,020	52.75	381	19,199	50.39
III. TRADE AND TRANSPORTATION	101	5,117	50.66	50	2,672	53.44	151	7,789	51.58
IV. MANUFAC- TURES, ME- CHANICAL AND MINING INDUS-									
TRIES	209	9,842	47.09	226	11,524	50.99	435	21,366	49.12
V. Females	40	1,408	35.20	32	1,205	37.65	72	2,613	36.29
ALL CLASSES	579	27,829	48.06	635	34,990	55.10	1,214	62,819	51.74

# TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1882. Deaths at ages under twenty being excluded.

Uterus, Disease of.	1 ::	:::::::::::::::::::::::::::::::::::::::
Uræmia,	1 ::	
Tumor.		
Tuberculosis,		: : : : : : : : : : : : : : : : : : : :
Syphilis,		:::::::::::::::::::::::::::::::::::::::
Syncope, Syncope,	::	:::=:=:::::::::::::::::::::::::::::::::
Stomach, Diseases of,		:::::::::::::::::::::::::::::::::::::::
Spine, Disease of.		
Scrofula,	i ::	= : : : : : : : : : : : : : : : : : : :
Rheumatism,	1 ::	:::::::::::::::::::::::::::::::::::::::
Prostate, Disease of.	- :	
Pneumonia and Lungs, Cong. of.	1 55	: : : : : : : : : : : : : : : : : : : :
Pleurisy.	::	: : : : : : : : : : : : : : : : : : :
Peritonitis,		:::::::::::::::::::::::::::::::::::::::
Old Age.	38	
Murder. Neuralgia.	-	: : : : : : : : : : : : : : : : : : :
Meningitis, Spinal.	::	
Meningitis, Cerebro-Spinal.	:	
Marasmus,	1 ::	
Liver, Diseases of.	1 4:	::::::::::::::::::::::::::::::::::::::
Laryngitis.	::	:::::=:::::::::::::::::::::::::::::::::
Knee-Joint, Disease of.	::	:::::::::::::::::::::::::::::::::::::::
Kidneys, Diseases of.	9 -	. : : : : = : : : : : : : : : : : : : :
Intemperance and Del. Trem's.	::	
Insanity.	€ ;	
Нетогтhаge, Нетпіа,		
Heat.	::	
Heart, Diseases of.	900	::::==:::::::::::::::::::::::::::::::::
Gangrene,	:::	:::::::::::::::::::::::::::::::::::::::
Fevers.	+:	:::::::::::::::::::::::::::::::::
Erysipelas.	-:	:::::::::::::::::::::::::::::::::::::::
Epilepsy.	1 :	
Dropsy.	9-1	65
Dysentery.	es :	
Diarrhea.	- :	: : : : : : : : : : : : : : : : : : :
Diabetes,	03:	:::::::::::::::::::::::::::::::::::::::
Consumption.	==	::000 :au :a :u ::00 :uu ::
Cholera Morbus.	67 :	:::::::::::::::::::::::::::::::::::::::
Carbuncle,	::	
Cancer,	3 10	: : : : : : : : : : : : : : : : : : :
Bronchitis.	10:	
Bladder, Diseases of. Brain, Diseases of.	1 4 :	
Asthma,	61 ;	
Aneurism.	::	
Apoplexy and Paralysis.	27	: :ㅁ :ㅁ색 : : : : :ㅁ :ㅁㅁ : : :ㅁ
Adenitis.	::	
Accidents.	. s. :	
Whole number of given causes.	150	3,14888888448120100
, J. 10-1-10-12-42-11		
	I. AGRICULTURE, Gardeners.	II Professional and Personal Artists. Autrists. Autrioneer Autrioneer Barbers. Bar Tonders. Clergymen. Cockinnen. Cockinnen. Cockinnen. Cockinnen. Autrioner
v <u>i</u>		PROPESSIONAL AND PERSONAL SERVICES. ISTS. SERVICES. SERV
NO	15.	### : : : : : : : : : : : : : : : : : :
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PA	310	ed ed
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occupations	I. AGRICULTURE,	PR PR PR PR PR PR PR PR PR PR PR PR PR P
	I rme	II PROFESSIONAL A Arthers. Arthers. Barbers. Barbers. Barbers. Bar Fonders. Clergymen. Clergymen. Clerkymen. Clerkymen. Clerkymen. Cooks. Horels. Horels. Horel Keepers. Horel Keepers. Horel Keepers. Horel Communist. Commist. Horel Commist. Horel Communist. Commist. Cooks. Horel Reepers. Flavorers. All Musicians.
	Far	AArt AAut Bar Bar Bar Cle Cle Cle Cle Cle Cle Cle Cle Cle Cle
	.,,	HERER * COHHHHOO

TABLE XII.-OCCUPATIONS AND CAUSES OF DEATH, 1882.-Continued.

Uterns, Disease of.		
Træmia.	:= : : : : : : : : : : : : : : : : : :	
Tumor.	:= : : : :	::::::::::::::::::::::::::::::::::::
Thereulosis,	1::: - :::	
Syphilis.	<u>  ::::::</u>	:::::::::::::::::::::::::::::::::::
Syncope.	: : : : : :	
Suicide,	1,:::::::	
Stomach, Diseases of.	::.:::	
Spine, Disease of.	] :::::::	:::::::::::::::::::::::::::::::::::::::
Scrofula.	1 : : : : : : :	:::::::::::::::::::::::::::::::::::::::
Rhenmatism.	:::=:::	:::::::::::::::::::::::::::::::::::::::
Prostate, Disease of.	1 : : : : : :	:::::::::::::::::::::::::::::::::::::::
Pneumonia and Lungs, Cong. of.	: : : : : : : ∞ −	::::=:::==::===:=======================
Pleurisy.	1 : : : : : :	:::::::::::::::::::::::::::::::::::::::
Peritonitis.	::::::::::::::::::::::::::::::::::::::	
Old Age.	·	
Neuralgia.		
Murder.	1	
Meningitis, Spinal.		
Meningitis, Cerebro-Spinal.		
Maraemus.		
Liver, Diseases of.		
Laryngitis,	::::::	
Knee-Joint, Disease of.	::::::	:::::::::::::::::::::::::::::::::::::::
Kidneys, Diseases of.	: = : : : : :	
Intemperance and Del. Trem's	<u>  ::::::</u>	:::: <u>=::::::::=:=:::</u>
Insanity.	<u>  ::::::</u>	::: :::::::::::::::::::::::::::::::::::
Hernia.		
Нешотграде.	: : . : : : :	:::::::::::::::::::::::::::::::::::::::
Heat.		
Heart, Diseases of.	_ cs _ : : :	: : : : : : : : : : : : : : : : : : :
Gangrene,	: . : : : : :	
Fevers.	:::: <del>-</del> ::	: : : : : : : : : : : : : : : : : : :
Erysipelas.		
Epilepsy.	]:::::::	
Enteritis.	1::::::	:::::::::::::::::::::::::::::::::::::::
Dropsy.	1::::::	:::::::::::::::::::::::::::::::::::
Dysentery.	<u>  : : : : : : : : : : : : : : : : : : :</u>	::::::::::::::::::::::::::::::::::::
Біаттрая,	<u>  : : : : : : : : : : : : : : : : : : :</u>	
Diabetes.	: : : : : : :	:::::::::::::::::::::::::::::::::
Consumption.	:4 : :4 to :	: . : : : : : : : : : : : : : : : : : :
Cholera Morbus.	1:::::::	
Carbuncle,	1::::::	
Cancer,	::::: <sup></sup>	:::::::::::::::::::::::::::::::::::::::
Bronchitis.	: : : : : :	
Brain, Diseases of.	] :::":::	: : : : : : : : : : : : : : : : : : : :
Bladder, Diseases of.	1::::::	: : : : : : : : : : : : : : : : : : : :
Asthma.	::::::	
Aneurism.	1::::::	:::::::::::::::::::::::::::::::::::::::
Apoplexy and Paralysis.	: :-	::=:::==::=:::::
Adenitis.	::::::	
Accidents.		::::::::::::::::::::::::::::::::::::::
causes.	200000000	
Whole number of given		
OCCUPATYONS.	Policemen. Saloon Keepers. Sheriff and Constable. Stable Keepers. Students. Waters.	III. Tradde and Trads. Agent, Insurance. Apothecary. Banker. Book-Keepers. Broker. Brother.
	Salc Salc Stal Stal Waj	Age Appe Ban Boo Boo Ban Bro

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Uterns, Disease of,		
Tumor. Uræmia.	1:::	
Tuberenlosis.	1 : : :	
Syphilis.	1:::	
Syncope.		
Snicide.	·	: : : : : : : : : : : : : : : : : : : :
Stomach, Diseases of.		::H:::::::::::::::::::::::::::::::::::
Spine, Disease of.	1:::	
Scrofula.	1:::	:::::::::::::::::::::::::::::::::::::::
Rheumatism.	1:::	: TT : : : : : : : : : : : : : : : : :
Prostate, Disease of.	1:::	:::::::::::::::::::::::::::::::::::::::
Pneumonia and Lungs, Cong. of.	::0	:.:.::::::::::::::::::::::::::::::::::
Plenrisy.	1:::	
Peritonitis.	1:::	
Old Age.	; : : <del></del>	::::::::::::::::::::::::::::::::::::::
Neuralgia.	1:::	
Murder.	: : :	
Meningitis, Spinal.	:::	1::::::::::::::::::::::::::::::::::::::
Meningitis, Cerebro-Spinal.	: . :	:::::::::::::::::::::::::::::::::::::::
Marasmus.	1:::	: : 현 : : : : : : : : : : : : : : : : :
Liver, Diseases of.	:	
Laryngitis.	: : :	
Knee-Joint, Disease of.	: : :	
Kidneys, Diseases of.	; ; €%	::=::::::=:::=::::::::::::::::::::::::
Intemperance and Del. Trem's.	1 : : :	:::::::::::::::::::::::::::::::::
Insanity.	1 : : .	
Hernia,	. : -	
Нетотграде.	1:::	: : : : : : : : : : : : : : : : : : :
Heat, Discases or.		
Gangrene. Heart, Diseases of.	:::	
Fevers.	. co :	: : : : : : : : : : : : : : : : : : :
Erysipelas.	::::	
Epilepsy.	:::	
Enteritis.	1::=	::::::::::::::::::::::::::::::::::::::
Dropsy.		
Dysentery.	::=	
Diarrhea.	:::	:::::=::::::::::::::::::::::::::::::
Diabetes.	:::	
Consumption.	: 05 05	:0.4 :==== :∞ := : : :==000 : : : : : : : : : : : : :
Cholera Morbus.	: : :	
Carbuncle.		
Сапсет.	:= :	::::::::::::::::::::::::::::::::::::::
Bronchitis.	: : -	:::::::::::::::::::::::::::::::::::::::
Brain, Diseases of.	:::	1::::::::::::::::::::::::::::::::::::::
Bladder, Diseases of.	:::	::::::::::::::::::::::::::::::::::
Asthma.	: : :	
Aneurism.	: : :	
Apoplexy and Paralysis.	1	: : : : : : : : : : : : : : : : : : :
Adenitis,		
Accidents.	113	
Whole number of given	- 01	H 4 00
	:::	HZ ::::::::::::::::::::::::::::::::::::
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Sý.	: : :	S H
N.	002	A A A A A A A A A A A A A A A A A A A
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	n	Additional of the control of the con
OCCLPATIONS.	an an	LANGE OF THE STATE
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	Sea Captain. Teamsters. Traders and Dealers	IV. MANUFACTURES, ME- CHANDOAL AND MINING IN- DUSTRIES. Belt Maker Blacken. Blacken. Blacken. Block Printers Block Printers Boom Maker Boom Maker Builders. Carpenters. Carpenters. Carpenters. Carpenters. Confectioner Confectio
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Table XII. —OCCUPATIONS AND CAUSES OF DEATH, 1882. —Continued.

Uterns, Disease of,	<u>:</u> :::::::::::::::::::::::::::::::::::
Uræmia.	
TomnT.	<u>  ::::::::::::::::::::::::::::::::::::</u>
Tuberculosis.	
Syphilis.	: : : : : : : : : : : : : : : : : : :
Syncope,	
Suicide.	cs := := : : :co := : : : : = : : : : : : : : : : : : :
Stomach, Diseases of.	
Spine, Disease of.	: : : : : : : : : : : : : : : : : : :
Scrofula.	
Rheumatism.	::::::::::::::::::::::::::::::::::::
Prostate, Disease of.	
Pneumonia and Lungs, Cong. of.	ασσ : : : : : : : : : : : : : : : : : :
Pleurisy.	: :Ħ : : : : : : : : : : : : : : : : :
Peritonitis.	::::::::::::::::::::::::::::::::::::
Old Age.	ंछ 4 म ं ं ं ं मध्य म ः ः ः ः ः ः ः ः व्ह ः ः म ः
Neuralgia.	
Murder.	
Meningitis, Spinal.	
Meningitis, Cerebro-Spinal.	
Marasmus,	
Liver, Diseases of.	c3
Laryngitis.	
Knee-Joint, Disease of.	
Kidneys, Diseases of.	HOV CK     H   H
Intemperance and Del. Trem's.	
Insanity.	
Hemorrhage. Hernia,	· · · · · · · · · · · · · · · · · · ·
Heat, Discuss of,	
Heart, Diseases of.	
Gangrene,	⊗
Fevers.	
Epilepsy.	: : : : : : : : : : : : : : : : : : :
Dropsy.	- : - : : : - : : : : : : : : : : : :
Dysentery.	. н
Diarrhæa.	
Diabetes,	
Consumption,	100 H 10
Cholera Morbus.	1
Carbuncle.	
Cancer,	
Brain, Diseases of.	
	- · · · · · · · · · · · · · · · · · ·
Astbma. Bladder, Diseases of.	· · · · · · · · · · · · · · · · · · ·
Aneurism.	
	no no   im   im   im   im   im   im   im   i
Adentus. Apoplexy and Paralysis.	
Accidents.	4
causes.	212805-18055480000-0-1-1-0-0-0000000
Whole number of given	4 H W W H
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P.A	rrs:
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OCCUPATIONS.	List hist hist hist hist hist hist hist h
0	nuin nuin
	Machinists  Mandracturers  Manons  Millors  Mochanics  Mullwrights  Operatures  Operatures  Pantern Makers  Pantern Makers  Pantern Makers  Port Pattern  Port Pattern  Riger  Riger  Riger  Rape Maker  Rape Make
	ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

11		
Uremia. Uterus, Disease of.		: ::::::::::::::::::::::::::::::::::::
Tumor.		: : : : : : : : : : : : : : : : : : :
Tuberculosis,		
Syphilis,		
Syncope,		111111111111
Suicide.	1:::	::-::::::::::::::::::::::::::::::::::::
Stomach, Diseases of.		<u> </u>
Spine, Disease of.		<u> </u>
Scrofula.		
Rheumatism.	1	
Preumonia and Lunge, Cong. of. Prostate, Disease of.	-::	· · · · · · · · · · · · · · · · · · ·
Plenrisy.		
Peritonitis.		
Old Age.		: : : = : : = = : : 0?
Neuralgia.		:::::::::::::::::::::::::::::::::::::::
Murder,		:::::::::::::::::::::::::::::::::::::::
Meningitis, Spinal.	1:::	::::::::::::::
Meningitis, Cerebro-Spinal.	1:::	:::::::::::::::::::::::::::::::::::::::
Marasmus.	1:::	
Liver, Diseases of.	:::	:: : : : : : : : : : : : : : : : : : : :
Laryngitis.	: : :	::::::::::::::::::::::::::::::::::::
Knee-Joint, Disease of.	1:::	
Kidneys, Diseases of.	: : :	
Intemperance and Del. Trem's		
Insanity.	1	
Нетыя,	1	
Heat.		
Heart, Diseases of.	1 174 1	· := · :== 0:00 · · ·
Gangrene,	1 : : :	
Fevers.	i := :	:= :C: : : : = :==
Erysipelas.	1:::	::::::::
Epilepsy.	::=	:::::::::::::::::::::::::::::::::::::::
Enteritis.	: : :	
Dropsy.	1 : : :	:::::::::::::::::::::::::::::::::::::::
Dysentery.		::::::::::::::::::::::::::::::::::::
Біятгіз білен біле		
Diabetes.	_ c · · ·	1 :4 : : :80 : : :
Cholera Morbus.		
Carbincle,		
Сапсет.		
Bronchitis.	1 : : :	
Brain, Diseases of.	:::	:::::::::::::::::::::::::::::::::::::::
Bladder, Diseases of,	:::	:::::::::::::::::::::::::::::::::::::::
Asthma.	::::	:::::::::::::::::::::::::::::::::::::::
Aneurism.	:::	
Apoplexy and Paralysis.	:::	:::=:::=::=
Adenitis.	:::	:: = : : : : : : : : : : : : : : : : :
Accidents.	3.4.0 ∴ :-	:::::::::::::::::::::::::::::::::::::::
Whole number of given causes.	30 0.00	
- 121	1 : : :	11211111111
	Upholsterers. Wheelwrights Wood Turner	V. FEMALES Cigar Maker Cigar Maker Dressmakers and Semist'ses. Housekeepers Milliners. Murses Murses Servants. Storekeeper Talloresses. Talloresses.
ri.	: : :	V. FEMALES Jerr Maker Jork Dressmakers and Semist'see louekeepers. Intraes. Williners. Williners. Speratives. Speratives. Servatis. Raidoresses. Raidoresses.
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OCCUPATIONS.	Upholsterers	V. FEMALES Cigar Maker Clock Dressmakers and Seams Inouscher Geweler Milliners Milliners Servants Servants Storekeeper Tailoresses.
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	phe bee	gar crk cerk cerk we illii irst ore ore ack
	523	STATERACOSTE

TABLE XII.—RECAPITULATION BY CLASSES.

Uterus, Disease of.	:	:	:	: 05   05	_
Uræmia.		_	:	1 :   8	_
Tumor.	:	-	:	:   05	_
Tuberenlosis.	7-4	4	:	4 1 01	_
Syphilis.	-			H :   co	_
Syncope,	:	_	:	: : : ! =	_
Suicide,	:	9	74	41 1 1 85	_
Stomach, Diseases of.	:	70	CJ.	교 : [꽃	_
Spine, Disease of.	- Yest	:	:	co	
Scrofula.	:	-	:	: :   =	_ i
Rheumatism.	:	C.S	-	τυ :   ∞	
Prostate, Disease of.		:	-	: :   25	-
	14	46	55	36	
Pneumonia and Lungs, Cong. of.				= :   ↔	
Pleurisy.	:_		<u> : </u>	4 % &	-
Peritonitis.			:		
Old Age.	es ∞			CS D	
Meuralgia.					-
Murder.		:			-
Meningitis, Spinal.		;		•	-1
Meningitis, Cerebro-Spinal.					-
Marasmus.	_ :_		:		
Liver, Diseases of.	4	000	70		
Laryngitis.	:		:	•	
Knee-Joint, Disease of.	:	-	:	: :   7	
Kidneys, Diseases of.	₹-	00	Ξ	4 : 12 38 : 38	_
Intemperance and Del. Trem's.	:	4	4		
Insanity.	CS.	-	CS.	cs :   5-	_
Hernia.	:	ବହ	-	دع : ا يــ	_
Нетогтраge.	:	G\$	:	4 4 5	
Heat.	:	-		: :   05	
Heart, Diseases of.	00	42	4	8 7 8	
Свлдгеле.	:		:	: : : "	
Fevers.	4	2.8	35	8 e 13	
Erysipelas.	·	G.S.	:	es = 1.0	
Epilepsy.	-	н	:	es : 173	
Enteritis.	-	6.3	G.	eo :   co	
Dropsy.		CS.	:	73 : 4	
Dysentery.	@ ?	70	-	4 : 5	
			:	H : 4	
Diarrhæa.	C5		=	: :   4	-
Diabetes.	- GE			263	-
Consumption.					
Cholera Morbus.	25		:		
Carbuncle.	:	-	:	: :   =	
Cancer.	11	00	ಣ	ص و۲ ا	
Bronchitis.	ಣ	4	-	ಣ : 9	_
Brain, Diseases of.	70	10	70	9 :   8	2
Bladder, Diseases of.	4		-	9 :   5	
Asthma.	CS.	25	:	- :   rc	
Aneurism.	:	-		: :   61	
	27	35	17	£ 8 1	-
Apoplexy and Paralysis.	- 24			. = -	-
Adenitis.	: :	:	:_	8 - 18	1
Accidents.	0.0	8	10	es 1 ~	_
csuses.	159	37.9	189	704	-
Whole number of given .				ECHANICAL AND NING INDUSTRIES.	-
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OCCUPATIONS.	I. AGRICULTURE	II. PROFESS'NAL AND PERSONAL SERVICES.	I. TRADE AND TRANS- PORTATION	MECHANICAL AND MINING INDUSTRIES V. FEMALES	
	H	H	III, TRADE AND TRANS- PORTATION		

In addition to the above:

I farmer, exposure; I florist, influenza; I laborer, exposure; I butcher, debility; 1, malignant pustale; I overseer, colic; I manufacturer, fits; I blacksmith, jaundice; 1 mariner, small-pox; 1 merchant, small-pox; 1 hostler; 1 sash maker, 2 operatives, embolism; 1 carpenter, diphtheria; 1 carpenter, lungs, disease of; 1 machinist, abscess; 1 saddler, debility; 1 file entter, abscess; 1 operative, diphtheria; 1 painter, lead colic; 1 seamstress, pyæmia.





# RESULTS AND OBSERVATIONS, 1882.

There were recorded in the State of Rhode Island, during the year 1882, six thousand eight hundred and twenty-five (6,825) births; two thousand six hundred and thirty-four (2,634) marriages; and five thousand and seventy-four (5,074) deaths.

TABLE XIII.

Presenting the General Results of Registration in the State, during each of the last twenty-nine years.

	Whole Number		Living		
Year.	of Births.	Still-born.	Births.	Marriages.	Death
1854	2,105	78	2,027	1,047	1.79
1855	2,926	124	2,802	1.375	1.9/
1856	2,906	183	2,723	1.535	2.0
857	4,026	185	3.841	1 526	9 9
858	4,263	177	4.086	1 438	9.6
.859	4,500	177	4,323	1.672	9.9
.360	4,660	167	4.493	1.748	9.6
861	4,840	146	4.694	1 533	a n
862	4,125	123	4.002	1 450	9.5
863	3.691	111	3.580	1.618	2.0
864	3,892	138	3.754	1.844	2.2
865	3,955	177	3,778	1.896	2 11
866	4,902	172	4.730	9.318	9.0
867	5,127	163	4.964	2.311	9.0
868	5,372	212	5,160	2.285	9.0
869	5,245	220	5.025	2 989	2 9
870	5,215	234	4.981	2 362	u,u
871	5,678	223	5.455	9 336	ەم.
872	6,143	202	5.941	9 597	
873	6,022	228	5.794	9 630	4.46
874	6,466	277	6 189	9 511	4,40
875	6,508	246	6 262	9.405	4.00
876	6,329	224	6 105	0.059	4.4
877	6,235	242	5 993	9 909	4,11
878	6,714	248	6.466	0.904	4,45
879	6,350	216	6 134	0.200	4,44
380	6,295	199	6 102	×,390	4,47
381	6,761	964	6.400	2,709	4,82
382	6,825	~U1	0,491	2,750	5,01

During the period of twenty-nine years there were recorded 148,-076 births, of which number 5,602 were still-born, and 142,474 were living children.

During the same period there were recorded 60,237 marriages, or 120,474 persons married, and 99,324 deaths.

On another page the usual table is given, showing a comparison of the births, marriages and deaths with the population, in each town in the State, for the year 1882.

An examination of Table XIII will show the slightly varying proportions in the number of the events of birth, marriage and death during the same year, and between different years, for a period of twenty-nine years.

This period covers the whole time during which fairly approximating fullness has characterized the returns from all the towns in the State.

The results of the aggregation of each of the different events, during twenty-nine years, give the proportions of living births to persons married and to decedents, are as follows:

The same results show that, in the whole number of births, one in every 26.4 was still-born, or 03.78 still-born in each 100 births; and that for every still-born child there were 25.4 living children, and for every death, not including the still-born, there were 1.43 living births.

Comparing the results of registration in 1882, as shown in Table XIII, it will be seen that the whole number of births was 64 more than in the previous year, and 111 more than in 1878, which had, previous to 1881, shown the largest returns of births on record in this State.

It will also be seen that the number of marriages and deaths have somewhat largely increased during the last three years, the number of marriages in 1881 though differing from that of 1880 by only 19, reached the number of 120 more than in any other preceding year, but failing in 1882 to reach the highest number by 135. The number of deaths in 1881 exceeded that of 1880 by 120, and that of 1879 by 544. In 1882, however, the increase over the previous year was only 58.

In Table XIV may be found the number of each of the events of birth, marriage and death occurring in each of the several towns and cities in the State, during 1882, and the proportion of the number of each of the same events to the population in each of the towns, by the census of 1880.

### TABLE XIV.

## BIRTHS, MARRIAGES AND DEATHS IN RHODE ISLAND, IN 1882, COMPARED WITH THE POPULATION BY THE CENSUS OF 1880.

TOWNS AND DIVISIONS OF THE STATE.	Population in 1880.	Births in 1882.	To population one birth in.	Marriages in 1882.	To population one person married in,	Deaths in 1882.	Of population one death in.	Deaths to each 100 of the population.
Barrington Bristol Warren	1,359 6,028 4,007	27 143 89	50.33 42.15 45.02	8 43 38	84.94 70.09 52.72	10 107 71	135.90 56.33 56.43	0.74 1,77 1.77
BRISTOL COUNTY	11,394	259	44.00	89	64.01	188	60.60	1.65
Coventry East Greenwich West Greenwich. Warwick	4,519 2,887 1,018 12,164	105 58 21 270	43.04 49.77 48.47 45.05	26 41 1 118	86,90 35,21 509,00 51,54	87 51 16 161	51.94 56.60 63.62 75.55	
KENT COUNTY	20,588	454	45.35	186	55.34	315	65.36	1.53
Jamestown. Little Compton Middletown New Shoreham Portsmouth Tiverton	459 1,202 1,139 1,203 1,979 2,505	4 17 26 27 25 63	114.75 70.70 43.81 44.55 79.16 39.76	2 10 8 5 11 23	71.18	5 20 7 13 35 39	91.80 60.10 162.71 92.54 56.54 64.23	1.09 1.66 0.61 1.08 1.77 1.56
Towns, Newport County	8,487	162	52.39	59	71.92	119	71.32	1.40
NEWPORT CITY	15,693	501	31.32	137	57.27	297	52.83	1.89
Burrillville  *Cranston. Cumberland. East Providence. Foster Glocester Johnston Lincoln. North Providence. North Providence. North Smithfield Pawtucket Scituate. Smithfield. Woonsocket.	5,714 5,940 6,445 5,056 1,552 2,250 5,765 13,765 1,467 3,088 19,030 8,810 3,085 16,050	118 128 149 153 12 46 154 362 22 65 457 63 40 457	48.42 46.40 43.25 33.04 129.33 48.91 37.43 38.02 66.66 47.51 41.64 60.47 77.12 35.12	115	50.35 57.45 77.60 66.17 106.76	78 98 136 82 16 22 74 220 10 41 350 51 24	73.25 60.61 47.39 61.66 97.00 102.27 77.90 62.56 77.21 75.31 54.37 74.70 128.54 46.65	1,65 2,11 1,62 1,03 0,91 1,28
Towns, Providence County	93,017	2,226	41.78	811	57.35	1,666	55.83	1.79
Providence City	104,857	2,788	37.61	1,172	44.73	2,242	46.77	2.14
Charlestown. Exeter. Hopkinton. North Kingstown South Kingstown Richmond. Westerly.	1,117 1,310 2,952 3,949 5,114 1,949 6,104	18 29 52 86 111 23 116	62.05 45.17 56.77 45.92 46.07 84.74 52.62	7 6 29 23 36 4 75	79.78 57.34 50.89 85.85 71.03 243.62 40.69	18 40 55 57 15	159.57 72.77 73.80 71.80 89.72 129.93 110.98	1.39 1.11
Washington County	22,495	435	51.71	180	62,48	247	91.07	1.10
WHOLE STATE	276,531	6,825.	40.52	2,634	52.49	5,074	54.49	1.83

<sup>\*</sup> Not including deaths in State institutions.

### BIRTHS.

The largest ratio of births to population occurring in any town, during 1882, was in the city of Newport, in which city there was recorded one birth in every 31.32 of the inhabitants according to the census of 1880.

That proportion, it will be understood, is more than three births in every one hundred of the population, which is a much larger ratio than Newport is wont to show, although that proportion was exceeded in 1878, the ratio that year being nearly three and one-half births in every one hundred persons.

Next to Newport city, in the order of largest number of births to population, are East Providence, one birth in every 33.04; Woonsocket, one in every 35.12; Johnston, one in every 37.43; Providence city, one in every 37.61; and Lincoln, one in every 38.00 of the population.

The smallest proportion of births, in 1882, was in the town of Foster, in which town there was but one birth in every one hundred and twenty-nine and one-third of its inhabitants.

Following Foster, in the order of the smallest proportion, is the town of Jamestown, with one birth in every one hundred and fourteen and three-fourths persons.

No other towns in the State return a birth rate of less than one, in every one hundred of its inhabitants.

The proportions of the several counties, the towns of Providence and Newport counties, the cities of Providence and Newport, and the whole State, are as follows:

Bristol County	ion,
Kent CountyOne birth in every 45.35 of the populat	ion.
Newport County, TownsOne birth in every 52.39 of the population	ion.
Newport CityOne birth in every 31.32 of the populat	ion.
Newport CountyOne birth in every 36.47 of the populat	ion.
Providence County, Towns One birth in every 41.78 of the populat	ion.
Providence CityOne birth in every 37.61 of the population	ion.
Providence CountyOne birth in every 39.45 of the population	ion.
Washington CountyOne birth in every 51.71 of the population	ion.
Whole StateOne birth in every 40.52 of the populat	ion.

### MARRIAGES.

The number of persons married in any town of small size in the State, in proportion to the population of the same, is so variable, from year to year, that the returns from single towns, in any one year, would be valueless for statistical purposes. But in towns of large size, and in

cities, the variations from one year to another are very much less. Aggregated in counties, the returns from the towns are, however, of sufficient value to furnish reliable statistical data.

The ratio of persons married during the year 1882, to the population in each of the several counties, by the census of 1880, was as follows:

Bristol County One person married in	n every	64.0 of	the population.
Kent CountyOne person married in	n every	55.0 of	the population.
Newport County One person married in	every	62.0 of	the population.
Providence CountyOne person married in	n every	50.0 of	the population.
Washington County One person married in	n every	62.0 o	the population.

For the purpose of showing the difference between the aggregates of some of the country towns and the cities of Providence and Newport, the following summary is presented:

Towns, Providence CountyOne person married in every 57.3 of the population	n.
Providence CityOne person married in every 44.7 of the population	n.
Towns, Newport CountyOne person married in every 72.0 of the population	n.
Newport CityOne person married in every 57.3 of the population	n.

In the whole State, the proportion was one person married in every 52.49 of the population.

### DEATHS.

Among the towns having the largest death rates, during 1882, Woonsocket, the city of Providence and the town of Cumberland are the most prominent. By the United States census of 1880 the proportions are as follows: Woonsocket, one death in every 46.6 of the population; Providence city, one death in every 46.7; Cumberland, one death in every 47.4 persons.

It should be stated, however, that the proportions given do not fairly represent the real proportions during the year 1882, for the reason that the towns named have largely increased in population since 1880.

Woonsocket, in June, 1882, had a population, it may reasonably be assumed, of at least 18,250 persons. This estimate of population would show, of recorded deaths in that town, one in about every 53.0 persons, or about 19 deaths in each thousand inhabitants.

In the city of Providence, in June, 1882, there were doubtless not less than 113,000 inhabitants. By that estimate the proportion of the city would be about one death in every 50.0 persons, or about 20 deaths in each thousand of the population.

Parts of Cumberland have also quite largely increased in population, and a proportion of 19 recorded deaths in each thousand inhabitants would probably more nearly represent the true number.

Of the towns having an exceedingly small recorded death rate, Middletown takes the lead with but one death in every 162.7 persons, or about 6 decedents to each one thousand of the population.

Charlestown follows, with 6.3 decedents in each thousand; Barrington, with 7.4 in each thousand; Richmond, 7.7; Smithfield, 7.8; and Westerly, with about 7,000 inhabitants, only 9.0 recorded decedents in each one thousand inhabitants by census of 1880, or about 8 in each thousand, by the above estimate.

Below may be found a summary of the ratios of mortality, during 1882, in the cities and larger divisions of the State, and the whole State, based upon the census of 1880.

Bristol County	each	one	thousand o	f the	population.
Kent County	each	one	thousand o	f the	population.
Towns, Newport County	each	one	thousand o	f the	population.
City of Newport	each	one	thousand o	f the	population.
Newport County	each	one	thousand o	f the	population.
Towns, Providence County	each	one	thousand o	f the	population.
City of Providence	each	one	thousand o	f the	population.
Providence County	each	one	thousand o	f the	population.
Washington County	each	one	thousand o	f the	population.
Whole State	each	one	thousand o	f the	population.

The following summary will present, in a condensed form, the proportional results of registration of the different events, in the different cities and countries, during 1882:

		Marriages.	
	Births.	Of population	Deaths.
	Of population	one person married	Of population
	one in every	in every	one in every
Bristol County	44.0	64.0	60.6
Kent County	45.3	55.0	65.4
Newport County	36.5	62.0	58.1
Providence County	39.4	50.0	50,6
Washington County	51.7		91.0
Newport City	31.3	57.3	
Providence City	37.6	44.7	46.7
Whole State	40.5	52.5	54.5

In order that the different events of births, marriages and deaths in the State, during the year 1882, may be more readily compared with those of the preceding two years, the following Table is introduced:

TABLE XV.

Births, Marriages and Deaths in Rhode Island, in each of the three years 1880, 1881 and 1882.

TOWNS AND DIVISIONS  OF THE STATE.	Births in 1880.	Births in 1881.	Births in 1882.	Marriages in 1880.	Marriages in 1881.	Marriages in 1882.	Deaths in 1880.	Deaths in 1881.	Deaths in 1882.
Barrington Bristol Warren.	17 181 80	13 147 79	27 143 89	12 30 55	14 51 56	8 43 38	21 121 77	15 112 77	10 107 71
BRISTOL COUNTY	278	239	259	97	121	89	219	204	188
Coventry. East Greenwich. West Greenwich. Warwick.	67 53 23 297	104 67 31 263	105 58 21 270	45 43 8 121	32 49 7 102	26 41 1 118	61 53 23 169	108 57 15 159	87 51 16 161
KENT COUNTY	440	465	454	217	190	186	306	339	315
Jamestown. Little Compton Middletown New Shoreham Portsmouth. Tiverton	5 14 29 10 32 50	11 9 24 20 40 52	4 17 26 27 25 63	2. 3 6 13 11 36	11 5 3 9 24	2 10 8 5 11 23	2 15 16 6 26 42	7 21 15 19 25 40	5 20 7 13 35 39
Towns, Newport County	140	156	162	71	52	59	107	127	119
NEWPORT CITY	399	349	501	123	117	137	243	253	297
Burrillville Cranston Cumberland East Providence Foster Glocester Johnston Lincoln. North Providence North Providence North Smithfield Pawtneket. Scitnate Smithfield. Woonsocket	125 120 143 124 22 46 146 290 29 21 404 78 56 371	138 123 172 124 15 41 139 432 29 68 519 71 66 441	118 128 149 153 12 46 154 362 22 65 457 63 40 457	42 22 56 40 26 19 22 90 27 204 31 18 187	44 25 62 45 22 20 27 99 1 33 236 42 28 176	34 29 64 44 10 17 27 115 2 33 219 35 26 166	105 146 107 77 21 42 81 188 16 45 351 58 331 318	79 170 97 87 32 49 60 318 11 41 342 48 325	78 209 136 82 16 22 74 220 19 41 350 51 24 344
Towns, Providence County	1,984	2,378	2,226	784	860	811	1,588	1,681	1,666
PROVIDENCE CITY	2,626	2,803	2,788	1,231	1,202	1,172	2,080	2,145	2,242
Charlestown. Exeter. Hopkinton North Kingstown South Kingstown Richmond Westerly	13 30 62 90 88 41 104	13 20 62 99 85 32 60	18 29 52 86 111 23 116	13 14 60 35 36 3 85	14 12 32 29 40 6 75	7 6 29 23 36 4 75	15 20 34 67 40 33 77	11 23 56 58 51 26 42	7 18 40 55 57 15
Washington County	428	371	435	246	208	180	286	267	247
WHOLE STATE	6,295	6,761,	6,825	2,769.	2,750	2,634	4,829	5,016	5,074

TABLE XVI.

Showing the proportions of Births, Marriages and Deaths to the population, in the aggregate for the whole State, in each of the last fourteen years.

	BIF	RTHS.	MARI	RIAGES.	DEATHS.		
YEARS.	Number. To population one birth in Number. Of population one person married in Number.		Of popula- tion one death in	Deaths in each 100 of the popu- lation.			
1869	5,245	41.4	2,289	47.5	3,382	64.2	1.56
1870	5,215	41.7	2,362	46.0	3,238	67.1	1.49
1871	5,678	38.2	2,336	46.5	3,444	65.0	1.54
1872	6,143	35.4	2,537	42.9	4,247	51.2	1.95
1873	6,022	36.1	2,630	41.3	4,403	49.4	2.03
1874	6,466	39.9	2,541	50.8	4,229	61.1	1.64
1875	6,508	39.7	2,485	52.0	4,317	59.8	1.67
1876	6,329	40.8	2,253	57.3	4,116	62.7	1.59
1877	6,235	41.4	2,282	56.6	4,450	58.0	1.72
1878	6,714	38.5	2,324	55.7	4,441	58.1	1.72
1879	6,350	43.6	2,396	57.8	4,472	61.9	1.60
1880	6,295	43.9	2,769	49.9	4,829	57.3	1.75
1881	6,761	40.9	2,750	50.3	5,016	55.1	1.81
1882	6,825	40.5	2,634	52.5	5,074	54.5	1.83

It will be seen that there were a larger number of births recorded, in 1882, than in any preceding year. But, although the number was larger, the proportion to the population was considerably smaller than in several of the previous years, and particularly in 1872, as shown in the above Table.

The proportion during 1882 was about 24.7 births in each 1,000 of the population, by the census of 1880; the proportion during 1872 was about 28.2 births in each 1,000 of the population, by the census of 1870.

Making two periods, of five years each, from 1872 to 1881 inclusive, it will be found that the proportion of births to population was about 26, annually, in each thousand persons, in the first series; and about 24, annually, in each thousand, in the last series of five years.

Each of these periods commences two years after a National or State enumeration of the population, and may, therefore, fairly represent the difference in the relative proportions of births to population, in each period.

In 1882 the proportion was slightly larger than the average of the five years immediately preceding, according to the census of 1880, but not really larger in proportion to the true population of that year.

The proportion to the population of persons married in the State, during the two periods of five years above stated, as compared together, showed a considerable diminution also.

During the first period the proportion was about 20.5 persons married annually, in each thousand persons, and during the second period about 18.3 persons married annually, in each thousand.

In 1882 there was the seemingly larger proportion of 19 persons married, in each one thousand of the population, but by the real population less than 18.

The proportion of deaths to population, during each of the same periods, was as follows: First period, 17.7 decedents annually in each thousand persons; Second period, 17.2 decedents annually in each thousand persons.

In 1881 the proportion was 18.1 in each thousand, and in 1882, 18.3. These proportions, it will be understood, are based on the United States census of 1880, but if the proportions of each year were based on the actual population in the middle of each year, the proportions would vary but very little from the average of the five years preceding 1882.

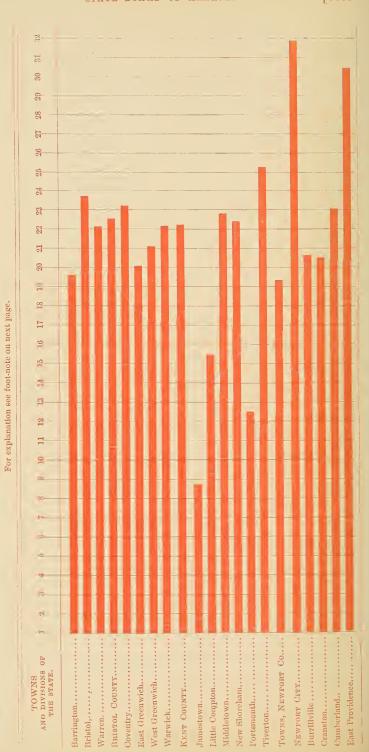
Estimating the population of the State at 295,000, in June, 1882, which seems quite reasonable, the proportion of deaths to population during that year was 17.2 in each one thousand, the same as the average of the preceding five years.

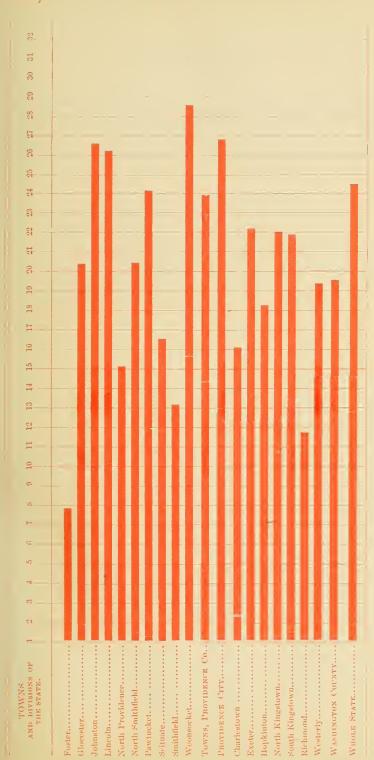




BIRTH RATES.

Diagram showing the number of births in each 1000 of the population during the year 1882, in each town and in each county in the State, by the census of 1380.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of births during the year in every 1000 persons. The spaces are fractional parts of one. For instance, the beard portional lines can be are actively in 1882, was about nine teen and one-find in each 1000 of the population.



# BIRTHS, 1882.

The general statistics of births in Rhode Island, during the year 1882, derived from the returns sent to this office, may be found on pages 10 to 14 inclusive, in Tables I, II, and III.

The whole number reported is 6,825, and, as before stated, is 64 more than that of 1881.

#### SEX OF THE CHILDREN BORN.

Of the 6,825 children whose births were reported in 1882, there were 3,509 males and 3,316 females. This gives 105.8 males to each 100 females, or 51.41 males and 48.59 females in each 100 children.

The following recapitulatory Table shows the numbers and sex, and the proportions of each sex of the children born in Rhode Island, in each of the last twenty-nine years:

TABLE XVII.

			Males to each		
Years.	Males.	Females.	100 Females.	Males.	Females.
1854	1,081	1,003	107.8, or	51.87 an	d 48.13 in each 100
			105.0, or		
1856	1,479	1,407	105.1, or	51,25 an	d 48.75 in each 100
1857	2.057	1,948	105.6, or	51.36 an	d 48.64 in each 100
1858	2.200	2,053	107.2, or	51.73 an	d 48.27 in each 100
1859	2,209	2,097	105.3, or	51.30 an	d 48.70 in each 100
1860	2;263	2,212	102.3, or	50.57 and	d 49.43 in each 100
1861	2.531	2,291	110.5, or	52.49 an	d 47.51 in each 100
1862	2,152	1,967	109.4, or	52.25 an	d 47.75 in each 100
1863	1,892	1,288	105.8, or	51.41 an	d 48.59 in each 100
1864	1,949	1,942	100.3, or	50.09 an	d 49.91 in each 100
1865	2,096	1,857	112.9, or	53.02 and	d 46.98 in each 100
1866	2,546	2,356	108.0, or	51.94 and	d 48.06 in each 100
1867	2,665	2,464	107.0, or	51.87 and	48.13 in each 100
1868	2,745	2,627	104.5, or	51.10 and	d 48.90 in each 100
1869	2,685	2,560	104.9, or	51.19 and	d 48.81 in each 100
1870	2,679	2,536	105.6. or	51.37 an	d 48.63 in each 100
1871	2.878	2,800	102.8, or	50.69 and	d 49.31 in each 100
1872	3,085	3,058	100.9, or	50.22 and	d 49.78 in each 100
1873	3.135	2.887	108,6, or	52,06 an	d 47.94 in each 100
1874	3,311	3,155	104.9, or	51.21 and	d 48.79 in each 100
			106.9, or		
			108.3, or		
1877	3.163	3.072	103.0, or	50.73 and	d 49.27 in each 100
			102.7, or		
			105.4, or		
			106.S. or		
			107.2, or		
			105.8, or		

It will be seen, by Table XVII, that the number of male children born in Rhode Island, during 1882, was but eleven more than during the previous year, although numbering 268 more than in 1880.

The number of female children born, during the year, was 53 more than in 1881, and was larger in number than in any preceding year.

## PROPORTION OF THE SEXES.

The proportion of each sex to the whole number varies more or less every year, as might reasonably be expected.

In Table II, on pages 12 and 13, may be found the number of the children born in the different divisions of the State during the year, and in the several months of the year, with the number of each sex respectively.

The following Table will present, in a more concise manner, the whole number of children of each sex, and of both sexes, in each division, whose births were recorded during 1882, and also the number of males to each 100 females in the same:

$T_{\rm A}$	BLE	XI	VIII.

BIRTHS, 1882.	Bristol County.	Kent County.	Newport County Towns.	Providence County Towns.	Washington County.	Newport City.	Total.	Providence City.	Whole State,
Males	127	238	97	1,132	223	254	2,071	1,438	3,509
Females	132	216	65	1,094	212	247	1,966	1,350]	3,316
Total	259	454	162	2,226	435	501	4,037	2,788	6,825
Males to each 100 Females	094.7	110.2	149.2	103.4	105.7	102.9	105.3	106.5	105.8

Very considerable differences in the proportions of male and female births occurring in 1882, in the different divisions and localities of the State, will be seen in the above Table. In one division there may be a less number of male than of female births in one year, and in the next year, in the same division, a large excess of male over female births.

Bristol county has usually had a large preponderance of males in the birth list, but during the year 1882 the proportion of males to females was less than equal in number, by nearly five to each hundred females. In 1881 the difference was still greater, the males being less than equal in number, by nearly nine to each hundred females. The difference in the towns of Newport county, separate from Newport city, is quite remarkable, the proportion of nearly fifty per cent. of male births, in excess of female births, never having previously occurred in any of the larger divisions of the State.

The differences in Newport county towns of the proportions of the sexes born, during the last three years respectively, show how large the variations sometimes are from year to year.

In 1880, in Newport county towns, the births were 137.3 males to each 100 females; or 57.86 males and 42.14 females in each 100 children born.

In 1881, in the same towns, the births were 105.3 males to each 100 females; or 51.28 males and 48.72 females in each 100 children born.

Table XVII shows the varying proportions, in the whole State, during twenty-nine years. It will be seen, in that Table, that the excess of male births was very small in several of the given years, varying from 100.3 males to each 100 females, in 1864, to 112.9 males to each 100 females in 1865.

In the whole State, the number of births of male children has always been larger, every year, than the births of female children.

The differences of proportion of the sexes, born in the two largest divisions of population during 1882, and also the whole State, may be shown by the following contrast:

			Males to
	Males.	Females.	each 100 females.
Providence City	1,438		106.5
Providence County, To	owns1,132	1,094	103.4
Whole State	3.509		105.8

The subject will be further considered on another page.

The following Table shows the relative proportions of the sexes, born during each of the last twenty years, in each of the larger divisions of the State, and in the whole State:

# TABLE XIX.

NUMBER	OF	MALES	$\mathbf{TO}$	EACH	100	FEMALES.
--------	----	-------	---------------	------	-----	----------

BIRTHS.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.	Whole State.
1863	120.0	98.4	97.0	101.8	111.4	108.7	105.8
1864	106.8	87.3	90.6	107.4	97.3	103.4	100.3
1865	119.3	118,2	108.8	118.9	113.8	88.1	112.9
1866	109.4	113.1	103.4	104.9	108 4	124.0	108.0
1867	115.5	98.3	117.8	106.3	104.5	120.4	107.7
1868	117.4	88.7	100.2	101.6	102.4	136.5	104.5
1869	115.7	116.7	102.7	98.0	107.5	120.6	104.9
1870	126.4	111.6	100.0	105.1	104.9	99.5	105.6
1871	131.8	97.9	132.5	100.8	95.2	113.3	102.8
1872	109.2	92.8	109.1	103.5	95.7	110.6	100.9
1873	129.2	113.0	117.9	104.5	109.0	104.7	108.6
1874	98.7	111.9	101.3	110.4	102.9	94.0	104.9
1875	95.2	103.1	97.7	104.3	109.1	134.3	106.9
1876	142.1	104.4	108.5	108.0	106.8	103.7	108.3
1877	138.7	102.4	98.5	100.3	104.9	95.3	103.0
1878	120.5	120.6	94.8	101.5	106.8	78.8	102.7
1879	124.3	95.5	103.6	105.4	105.7	106.3	105.4
1880*	117.2	110.5	113.0	102.4	107.6	95.4	106.1
1881	91.2	111.3	102.0	105.9	109.0	115.7	107.2
1882	94.7	110.2	112.5	103.4	106.5	105.7	105.8

The variations of proportion of the sexes, from year to year, in the whole State, are plainly shown in the above Table.

It may be of interest to see what has been the average annual proportion of the sexes born, during the last twenty years, in each of the different divisions of the State, or, in other words, the proportion of the aggregate of births of each sex, in each division, during the period of twenty years.

The following summary will show the number of males to each 100 females, born during the twenty years from 1863 to 1882 inclusive, in the different divisions of the State:

Bristol County	males	to	each	100	females.	
Kent County	males	to	each	100	females.	
Newport County	males	to	each	100	females.	
Providence County Towns	males	to	each	100	females.	
Providence City	males	to	each	100	females.	
Washington County	males	to	each	100	females.	
Whole State 105.6	males	to	each	100	females.	

# BIRTHS AND SEASON.

It has been a question whether the different seasons of the year had any influence upon the human system in regard to procreation or the births of children, as to number and sex.

On the 12th and 13th pages of this Report, in Table II., may be found the whole number of births as they occurred in the different divisions of the State in 1882, arranged by months.

It will be seen by that Table that the last three months of the year were more prolific than any other three months taken together, and that each of them had also a larger number of births than any other single month in the year.

This will also, by investigation, be found to be the rule during the whole period of registration.

The following Table shows the total number of children born in the State of Rhode Island, according to the returns, in each quarter of each of the last six years; and also the aggregate number and the percentage of the aggregate in each quarter of the last twenty-nine years, from 1854 to 1882 inclusive:

TABLE XX.

			,			1000	1854 to 1882.		
QUARTERS.	1882.	1881.	1880.	1879.	1878.	1877.	Number.	Per cent.	
January—March	1,616	1,534	1,521	1,465	1,622	1,399	35,073	23.75	
April—June	1,622	1,661	1,483	1,556	1,565	1,406	34,881	23.55	
July—September	1,711	1,746	1,640	1,653	1,731	1,674	38,696	26.13	
October-December	1,876	1,820	1,651	1,676	1,796	1,756	39,426	26.67	
Whole year	6,825	6,761	6,295	6,350	6,714	6,235	148,076	100.00	

An examination of the above Table will show that in a period of twenty-nine years the average percentage of the aggregate of births during the last three months of each year was about three per cent. larger than during either the first or the second three months of each year, and that the average of the third three months or quarter of the year was about two and one-half per cent. larger than either the first or second quarters.

If the last three months in the year are taken as the months in which the largest number of children are born, and reckoning in a general way backward by calendar months, it will be found that the conceptions must have taken place during the months of February, March and April.

The question is, whether there is anything in the season nearest the vernal solstice to promote aptness to procreation, or whether the customs and habits of the sexes during that season may alone account for the fact.

The coincidence of the larger number of marriages during the last quarter of the year, larger even than the proportion of births, may have some significance in this connection, in relation to the first children of the mothers, and may also continue to have some relation to the season of occurrence of births in subsequent years.

During the year 1882, the difference between the first half and last half of the year was rather larger than the average.

The following summary will show the percentages of births in the whole State of the different quarters and of each half of the year 1882:

January—March23.7 per cent. of whole number.  April—June23.7 per cent. of whole number.	First half 47.4 per cent.
April—June	}
July—September25.1 per cent. of whole number.  October—December27.5 per cent. of whole number.	Second half 59 6 per cent
October-December27.5 per cent. of whole number.	Second harrens do per cone.
_	
100.0	100.0

#### BIRTHS: SEX AND SEASON.

In Table II, on page 12, will also be found the number of births, by months, as they occurred in the different divisions of the State during the year 1882, arranged by the sexes. From it we ascertain the number of each of the sexes born during each quarter of the year, with their relative proportions; and also the aggregates and proportions of the same for the whole State.

The following Table will present a summary of the quarterly periods, number of births and proportion of the sexes, for the same:

				Males to each				
		Males.	Females.	100 Females.	Males.	Females.		
1.	January-March	830	786	105.6, or	51.36 and	l 48.64 in	each 1	00
2.	April—June	. 835	787	106.1, or	51.48 and	l 48.52 in	each 1	00
3.	July-September	.886	825	107.4, or	51.78 and	l 48.22 in	each 1	00
4.	October-December.	958	918	104.4, or	51.07 and	48.93 in	each 1	00
YYTI	1 1000	0.500	0.010					
	October—December.							

The following Table shows the number of male children born to each 100 female children, in each quarter of the last five years, and also the proportion of births of male children to each 100 female children born, during three periods of five years each, from 1866 to 1880, inclusive:

TABLE XXI.

YEARS.	1882.	1881.	1880.	1879.	1878.	5 years. 1876–1880.	5 years. 1871-1875.	5 years.
1st Quarter	105.6	113.4	109.7	104.6	106.6	106.9	101.5	106.7
2d Quarter	106.1	100.6	98.2	104.2	98.9	102.7	104.7	107.3
3d Quarter	107.4	107.8	103.4	101.6	103.8	107.1	104.S	106.0
4th Quarter	104.4	106.6	113.0	111.4	102.0	108.2	106.5	104.8
Total average	105.8	107.2	106.1	105.4	102.7	106.2	104.2	106.2

By the foregoing Table and Summary, it would appear that season has but very little influence in the causation of sex, or of any considerable difference in the number of births of either sex, whatever the influence may be in the direction of difference of whole number of births of both sexes.

The following summary will show the proportions of the sexes born in the State in each quarter of the year, in the aggregate of a period of twenty years:

	Males to each								
		100 Females,	Males.	Females.					
1.	January-March	. 105.8, or	51.41 and	l 48.59 in eac	h 100 births.				
2.	April—June	. 106.4, or	51.55 and	l 48.45 in eac	h 100 births.				
3.	July—September	104.3, or	50.85 and	l 49.15 in eac	h 100 births.				
4.	October—December	106.4, or	.51.55 and	1 48.45 in eac	h 100 births.				

#### PARENTAGE.

Whole No. 20 years. 105.6, or 51.37 and 48.63 in each 100 births.

By reference to Table I., page 10, in the division of births, there will be found the parentage of the children born in Rhode Island during the year 1882. It will be seen that of the whole number—6,825—there were 2,915 of American parentage, 2,788 foreign, and 1,122 of mixed parentage.

The following Table will show the parentage of the children born in the State, and the variations of the same from year to year, in each of the last five years, and also the number and variations occurring in five periods of five years each, from 1858 to 1882 inclusive:

rm.	3737 FT
TABLE	$-\lambda \lambda \lambda 11$ .

PARENTAGE.	1882.	1881.	1880.	1879.	1878.	5 years. 1878 to 1882.	5 years. 1873 to 1877.	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862.
Amer, fath, and mo	2,915	2,859	2,741	2,767	2,887	14,169	13,431	12,214	9,712	10,609
Foreign fath. and mo.	2,788	2,798	2,555	2,573	2,848	13,562	13,990	12,366	9,968	9,697
Amer. fath., For. mo.	512	493	417	442	463	2,327	1,782	1,353	876	814
For. fath., Amer. mo.	610	611	582	568	516	2,887	2,357	1,720	941	755
Parentage not stated									70	223
Total	6,825	6,761	6,295	6,350	6,714	32,945	31,560	27,653	21,567	22,098

The following Table of percentages may be preferred, as showing in a different, and perhaps clearer way, the changes that have occurred in the proportions of the births in the different classes of parentage during the last five years, and during twenty-five years from 1858 to 1882 inclusive, in five equal periods:

TABLE XXIII.

PARENTAGE.	1882.	1881.	1880.	1879.	1878.	5 years. 1878 to 1882.	5 years. 1873 to 1877.	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862,
Amer. fath. and mo	42.71	42.29	43.55	43.57	43.00	43.03	42.55	44.17	45.18	48.50
Foreign fath, and mo.	40.85	41.38	40.60	40.53	42.82	41.23	44.35	44.72	46.37	44.33
Amer. fath., For. mo.	7.50	7.29	6.62	6.96	6.35	6.95	5.84	4.89	4.07	3.72
For. fath., Amer. mo.	8.94	9.04	9.23	8.94	7.83	8.79	7.26	6.22	4.38	3.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

The movements in the two general classes of population in Rhode Island, that is, of foreign born and native American born, and also the intermixture by marriage in the two classes, during a period of twenty-five years, are clearly shown in the two preceding Tables.

In addition to Tables XXII. and XXIII., the following Table will show the percentages of children born of American and of foreign

fathers, and of American and foreign mothers, in each of the last five years, and in each of five periods of five years each, from 1858 to 1882 inclusive:

# TABLE XXIV.

CHILDREN WITH	1882.	1881.	1880.	1879.	1878.	5 years. 1878 to 1882.	5 years. 1873 to 1877.		5 years. 1863 to 1867.	5 years. 1858 to 1862.
American fathers	50.21	49.58	50.17	50.53	49.89	50.08	48.40	49.06	49.25	52.22
Foreign fathers	49.79	50.42	49.83	49.47	50.11	49.92	51.60	50.94	50.75	47.78
American mothers	51.65	51.33	52.78	52.51	50.68	51.79	49.80	50.39	49.56	51.95
Foreign mothers	48.35	48.67	47.22	49.49	49.32	48.21	50.20	49.61	50.44	48.05

The subjects of birth rate to whole population, and of birth rate to population by parentage, are of considerable interest, and were presented at greater length in the Twenty-ninth Report, on pages seventy to seventy-four.

### COLORED CHILDREN.

The number of births of children of colored parentage reported for the year 1882 is 179. They are always included in the general statistics of births, but having some special importance as to the survival of the race, and other questions, they have had a separate consideration. The number is smaller by 13 than that of 1881.

In regard to sex, the numbers and proportions were as follows, viz.: Males, 76; females, 103; or 41.34 males to 58.66 females in every 100 births; or 73.7 males to each 100 females.

The towns reporting colored births in 1882, and the number in each, are as follows:

Table XXV.

Showing Number, Sex, &c., of Colored Births, 1882.

TOWNS AND CITIES.	Whole Number.	Males.	Females.	COUNTIES.
Bristol	5	3	2	
Barrington	1		1	Bristol County 6
Coventry	2	••	2	
East Greenwich	7	1	6	
Warwick	6	3	3	Kent County 15
Jamestown	1		1	
Middletown	2	1	1	
New Shoreham	1	1		
Portsmouth	1	1		
Newport City	35	12	23	Newport County 40
Burrillville	1		1	
Cranston	4	3	1	
East Providence	3	1	2	
North Smithfield	1		1	
Pawtucket	1	1		
Scituate	1		1	
Providence City	96	44	52	Providence County 107
Charlestown	1	1		
Exeter	1		1	
Hopkinton	3	1	2	
North Kingstown	1	1		
South Kingstown	4	2	2	
Westerly	1		1	Washington County 11
Total	179	76	103	179

The proportions of the sexes of the colored children, born in different years in Rhode Island, have been singularly changeable, as the following summary will show:

	Whole			
Years.	No.	Males.	Females.	
1876	171	64	107	r 59.8 males to each 100 females.
1877	168	86	82	r 104.8 males to each 100 females.
1878	172	79	93	r 85.0 males to each 100 females.
1879	159	84	75	r 113.5 males to each 100 females.
1880	140		65	r 115.4 males to each 100 females.
1881	192	101	91 01	r 111.0 males to each 100 females.
1882	179	76	103	r 73.7 males to each 100 females.

# NUMBER OF THE CHILD OF THE MOTHER IN THE ORDER OF BIRTH,

Something may be learned of the physical capacity of any people by a record of the number and percentage of the births among them, and the number of the child of each mother. Such records, however, can only afford general conclusions, as there are so many circumstances that may prevail to modify the number of births as a whole, and also the number born of each mother.

The following Table shows the number of the child of the mother; that is, how many of the children born were reported as the first, second, or third child, etc., of their respective mothers. The statistics on this subject begin with the year 1857, and the following Table includes the children reported in 1881 and in 1882, and also the total for twenty-five years, 1857 to 1881 inclusive:

TABLE XXVI.

NUMBER OF THE CHILD OF THE MOTHER.	1881.	1882.	25 years. 1857–1881.
First	1,552	1,704	31,735
Second	1,306	1,189	26,110
Third	1,021	989	20,468
Fourth	816	805	15,423
Fifth	632	628	11,491
Sixth	464	481	8,330
Seventh	334	365	5,837
Eighth	248	245	3,996
Ninth	146	171	2,624
Tenth	99	93	1,711
Eleventh	51	56	984
Twelfth	41	50	602
Thirteenth	23	30	308
Fourteenth	6	12	151
Fifteenth	11	2	91
Sixteenth	7	4	49
Seventeenth	3	0	29
Eighteenth	1	1	8
Nineteenth	0	0	5
Twentieth	0	0	3
Twenty-first	0	0	3
Twenty-second	0	0	2
Potal	6,761	6,825	129,960

It will be understood that the above Table is approximate, and cannot, nor can any be prepared that will represent accurately the child-bearing capacity of the females of any population. Many females that live to the age of fifty years never becomes wives, that might in that social relation, if assumed in early years, have borne a large number of children. Many, also, of prolific capacity, after bearing one or two children, pass out of existence by disease or accident, early in the natural period of child-bearing. Nor does the Table represent the real capacity of wives and mothers living at the time of making the returns during a period of twenty-five years and more, because of means resorted to for the purpose of procuring abortion or miscarriage, and also for the far more extensive adoption and practice of measures for the prevention of conception.

It will be noticed in the Table that the number of the first child of the mother in 1882 was very considerably larger than the number in 1881, while the number of the second child was very much smaller in 1882 than in the previous year. Such differences, however, are of frequent occurrence. Of the fourteenth child of the mother, there were twice as many in 1882 as in the previous year; and of the fifteenth child, there were less than one-fifth as many.

The proportion of each class to the whole number will be shown by the following Table, which gives the percentage of the children born in each of the last six years, who were respectively the first, second, third, etc., children of the mothers, and which will also give the average percentage of each class of births, during a period of ten years, from 1868 to 1877 inclusive, and of five years, 1878 to 1882 inclusive:

10 years. 1868 to 5 years. 1878 to 1882. 1878. 1877. NUMBER OF THE CHILD. 1882. 1881. 1880. 1879. 1877. 23.1 25.2 22.93 First..... 24.9622,92 23.50 22.59 21.77 19.31 20.98 18.7 20.7 Second..... 17.84 18,80 20,26 Third.... 15.10 16.11 15.87 18.90 16.22 16.9 15.5 12.07 12.24 12.74 12.32 12.2 11.4 Fourth..... 12.09 9.35 8.77 9.07 8.4 Fifth.... 9.23 9.33 9.1 First to Fifth ..... 77.85 78.75 78.92 79.33 82.02 80.0 81.1 21.08 20.0 18.9 Sixth and over..... 100.00 100.00 100.00 100.00 100.00 100.00 100,00 100.00

TABLE XXVII.

It has been frequently before observed that the percentages of the classes in the order of number of the child of the mother not only vary from year to year, but changes also occur in the percentages of periods of years.

For a period of ten years, previous to 1878, the average proportion of the class of first child was 25.2 per cent. of the whole number of births, or more than one quarter; while during the last five years, 1878–1882, the proportion has averaged only 23.1 per cent.

In the class of second child of the mother, the average of the same period of ten years was 20.7 per cent. of the whole number of births; while during the last five years the average has been only 18.7 per cent.

In the class of fifth child the average of the same ten years was 8.4 per cent., while during the last five years the average has been 9.1 per cent.

In all the classes of the sixth child of the mother and over, the average of the same ten years was 18.9 per cent., and during the last five years the average of the same classes has been 20 per cent.

It will be observed that the average percentage of children born of mothers, who have borne six children or more, has increased decidedly during the last five years.

### PLURALITY BIRTHS.

The general statistics in relation to plural births in Rhode Island may be found on page 14, in Table III.

There were sixty-one cases during the year, all of which were twins, or one hundred and twenty-two children.

Of the 122 children of plural births, 62 were males, and 60 females. The cases occurred in the different divisions of the State as follows: Kent county, 1; Newport county, towns, 3; Newport city, 5; Provi-

dence county, towns, 18; Providence city, 29; Washington county, 5. Bristol county made no return of a case of plural birth.

The following exhibit will show the parentage of children of plurality birth in Rhode Island in 1882, and number of each:

Parents, Native American, or born in the United States	. 54
Born in Ireland	. 30
" " British America	. 10
" " England	. 2
" " Italy	. 2
" " Germany	. 2
" " Sweden	. 2
" '' Norway	. 2
American father and Irish mother	. 6
British American father and English mother	. 2
Italian father and American mother	. 4
English father and American mother	. 2
Scotch father and Irish mother	. 2
Irish father and Scotch mother	. 2
Total	.122

In relation to season, the numbers in the different months were as follows:

January 7	April 5	July 7	October 3
February 7	May 3	August 5	November ?
March 1	June 2	September 5	December 9
_	_	_	_
First Quarter15	Second Quarter 10	Third Quarter17	Fourth Quarter 19
Т	otal		61

The general statistics of births, and number of cases reported in Rhode Island during a period of twenty-nine years, that is, from 1854 to 1882 inclusive, are as follows:

144,939	cases	of	single births,g	iving	144,939	children.
1,540	cases	of	twin birthsgr	ving	3,080	children.
19	cases	of	triple birthsg	iving	57	children.

146,498 cases of child birth.....giving 148,076 children.

Of the whole number of cases of child-birth (146,498) during the twenty-nine years, one in 95.1 produced twins, and one in 7,710 produced triplets.

Of the whole number of children born, during the same period (148,076), ascertained from the reports, one in every 48 was a twin, and one in every 2,598 was a triplet.

Of the 1,559 cases of plurality births which have occurred in the State during the last twenty-nine years, there were 675 cases in which both parents were Americans; 740 cases in which both parents were foreign; 136 cases in which the parentage was mixed, that is, one American and one foreign parent; and 8 in which the parentage was not stated.

The whole number of children born in plurality cases, during the twenty-nine years, was 3,137, of whom 1,585 were males, and 1,548 were females; the sex of the remaining four was not given.

#### STILL-BORN.

The whole number of still-born children reported in Rhode Island for the year 1882 was 253; this number is 11 less than for the year 1881, and 61 more than for 1880.

The following are the numbers reported from the different divisions of the State:

Bristol County 5	Providence County, Towns 50
Kent County	Providence City162
Newport County, Towns 2	Washington County 4
	_
Newport City	Whole State

The following exhibit will present a more general summary:

# TABLE XXVIII.

Still-Born in 1882. Number, Sex, Parentage, Color.

TOWNS.	Whole Number.	Male.	Female.	Americ'n.	Foreign.	White.	Colored.
Bristol	4		4	4		4	
Warren	1	1		1	•••	1	
Coventry	6	2	4	5	1	6	
East Greenwich	3	2	1	1	2	3	
West Greenwich	3		3	3		3	
Warwick	1	1		1		1	
Middletown	1	1		1		1	
New Shoreham	1		1	1		1	
Newport City	17	11	6	7	10	14	3
Burrillville	2	1	1		2	2	· · · · · · · · · · · · · · · · · · ·
Cranston	5	2	3	2	3	5	
Cumberland	7	3	4		7	7	
East Providence	5	4	1	3	2	5	
Glocester	1	· · · · · · · · · · · · · · · · · · ·	1	1		1	
Johnston	1	1		1		1	
Lincoln	7	5	2	5	2	7	
Pawtucket	11	2	9	7	4	11	
Woonsocket	11	4	7	5	6	11	
Providence City	162	96	66	78	84	158	
Charlestown	1	1		1			
Hopkinton	2	1	1	2		2	
Westerly	1		1		1	1	
Total	253	138	115	129	124	246	

Fourteen towns made no report of still-births.

Sex.—Of the 253 still-born children, in 1882, 138 were males and 115 were females.

The number of males and females were much more nearly equal in 1882 than during any known previous year. Table XXIX. will show the average inequality of a period of years.

Parentage. — Of parentage, reckoned by the fathers, 129 were American, and 124 foreign. Reckoned by the mothers, 128 were American and 125 were foreign. Parentage further considered on another page.

Color.—The number of colored still-born was 7, as against 18 in 1881.

Season.—The number of still-born children reported in each of the several months of 1882 was as follows:

January 23	May	September22
February23	June23	October23
March12	July23	November27
April14	August21	December25
(D-4-1		200

## SUMMARY OF STILL-BORN.

The following Table shows the number and sex of the still-born children whose births were reported in Rhode Island, during each of the last six years, and also of a period extending from January 1, 1854, to December 31, 1882:

TAB	LE	XXIX.

SEX.	1882.	1881.	1880.	1879.	1878.	1877.	January 1, 1854, to Dec. 31, 1882.
Males	138	169	123	124	149	147	3,365
Females	115	95	69	92	99	95	2,337
Total	253	264	192	216	248	242	5,602

It will be seen that the whole number of still-births reported in the State since January 1, 1854, is 5,602. Of the sex of this number, there were 3,365 males, and 2,337 females. The ratio of occurrence, in regard to sex, would therefore be as follows: In each 100 children there were about 60 males, and 40 females; or for every 100 females there were nearly 150 males.

It will be seen that the proportion for the year 1882 varies largely from the average of a period of twenty-nine years. The proportion standing at 120 males to each 100 females; or 54.5 males and 45.5 females in each 100.

Season of Still-Births.—The following summary will show the number of still-births that have been reported in Rhode Island during a period of twenty-nine years, from 1854 to 1882 inclusive, with the months and quarters in which they occurred;

STILL-BORN—TWENTY-NINE YEARS, 1854-1882. SEASON.										
January504	April 432	July 482	October 434							
February477	May 440	August 494	November 478							
March 444	June 419	September 468	December 530							
			_							
1st Quarter1,425	2d Quarter1,291	3d Quarter1,444	4th Quarter1,442							

First six months, 2,716; second six months, 2,886; total, 5,602.

Taking the quarterly periods, it will be seen that the occurrence of still-births, in the order of from the smallest to the largest number, has been as follows: 1st, Second quarter; 2d, First quarter; 3d, Fourth quarter; 4th, Third quarter. In accordance with the general birth rate, the last half of the year has considerably the largest proportion.

#### PARENTAGE OF THE STILL-BORN.

It has been previously stated that the parentage of the still-born was not made a matter of record, for incorporation in the annual registration reports, previous to the year 1859.

To show the changes that have occurred from year to year in the percentages of parentage of the still-born, reckoning by the parentage of the mother, in contrast with the percentages of the same nativities to the whole number of births, reckoned by the parentage of the father, the following resumé, for various years and periods of years, is presented:

	Of Whole No. Births.	Of Whole No. Still-Born.
Years.	American. Foreign.	American. Foreign.
1871	49.36 and 50.64 in	each 10041.00 and 59.00 in each 100.
1872	47.59 and 52.41 in	each 10041.25 and 58.75 in each 100.
1873	50.30 and 49.70 in	each 100 59.21 and 40.79 in each 100.
1874	47.14 and 52.86 in	each 100
1875		each 100
1876	46.43 and 53.57 in	each 100
1877	49.41 and 50.59 in	each 100 53.31 and 46.69 in each 100.
1878	49.35 and 50.65 in	each 10055.65 and 44.35 in each 100.
		each 100 54.63 and 45.37 in each 100.
•		each 10054.16 and 45.84 in each 100.
		each 100
		each 100
14 years,		
	50.54 and 49.46 in	each 100
10 years,		
	49.10 and 50.90 in	each 100

#### ILLEGITIMATES.

Heretofore, illegitimate births have not been given a place in the Rhode Island Registration Reports. For several reasons, it seems desirable and expedient at this time to give them consideration.

The following Table will give the number, sex, color and parentage of the illegitimate children born in Rhode Island, during 1882:

TABLE XXX.

	er.	SE	х.	COL	OR.	PARE	NTAGE.	es ions.
TOWNS.	Whole Number.	Males.	Females.	Black.	White.	American.	Foreign.	Almshouses or Penal Institutions.
Coventry	1		1		1	1		
East Greenwich	3		3	2	1	3		
Portsmouth	1	1			1	1		1
Tiverton	1	1			1	1		
Newport City	6	2	4	5	1	6		
Cranston	2	2		1	1	1	1	
" State Almshouse	18	5	13	1	17	5	13	18
Lincoln	2	2			2	1	1	
North Smithfield	1		1		1	1		
Scituate	2	2			2	2		
Woonsocket	4	4			4	3	1	
Providence City	15	6	9	8	7	15		2
Charlestown	1	1		1		1		
Exeter	1		1		1	1		
South Kingstown	1		1	1		1		
Whole State	59	26	33	19	40	43	16	21

Sex.—Of the 59 illegitimate children born in the State, during 1882, 26 were males, and 33 were females, a proportion at the rate of about 80 males to each 100 females.

Color.—The proportion of illegitimates of color, born during 1882, is quite remarkable.

By the census of 1880 there were 6,592 persons of color in Rhode Island, including all shades, Blacks and Mulattoes, Indians, Chinese, Japanese, &c.

For every person of color there were about 42 whites.

By the above Table it will be seen that, of the 59 illegitimate births in 1882, there were 19 of colored parentage, and 40 of white parentage.

That would show that in a class of population according to color, comprising less than one-fortieth of the whole, there were nearly one-third of the illegitimate births.

Parentage.—Of the 59 illegitimates in 1882, 43 were born of American mothers, and 16 of foreign born mothers, The colored illegitimates were all of American parentage. There were, therefore, of the 40 white illegitimates, 24 born of American mothers, and 16 of foreign born mothers.

The parentage given is of native born and foreign born, that is, mothers born in the United States of foreign born parents are reckoned as of American parentage. Several of the illegitimates, classed as of American parentage, are the grandchildren of foreign born grand parents.

Twenty-one, or more than one-third of the illegitimates, were born of pauper or criminal mothers, in public, charitable or penal institutions.

# MARRIAGES, 1882.

The number of marriages reported in Rhode Island during the year 1882 was 2,634. This number is 116 less than in 1881, and 135 less than in 1880.

The general statistics of marriage in 1882, in relation to season and number in the different divisions of the State, may be found in Table IV., on the fifteenth page.

## SEASON.

The following Table will show the number and percentage of marriages in Rhode Island, in each quarter of the year 1882, together with the aggregate number and percentage in each quarter for twenty-eight years, viz., from 1854 to 1881, inclusive:

TABLE XXXI.

YEARS.	First	Second	Third	Fourth	Whole
	Quarter.	Quarter.	Quarter.	Quarter.	Year.
1882	561	654	581	838	2,634
	21.29	24.82	22.06	31.83	100.00
28 Years. Number  1854–1881 Percentage	12,900	14,297	13,483	16,923	57,603
	22.41	24.82	23.41	29.36	100.00

There was a larger difference between the number of marriages in the different quarters of the year 1882, than usual.

The proportion, in the fourth quarter, of nearly one-third of all the marriages during the year, has not been previously equalled.

It will be seen, by the Table, that the order of proportion followed the rule established by twenty-eight years of registration, that is, the largest number of marriages were solemnized during the last quarter, the next largest number during the second quarter, followed in that order by the third, and lastly by the first quarter.

## NATIVITY OF PERSONS MARRIED.

The following Table shows the *number* of marriages, according to the nativity of the parties, for each of the last six years, and also for the aggregate of five years, from 1878 to 1882 inclusive, and of twenty years, from 1858 to 1877 inclusive:

# TABLE XXXII.

BIRTH-PLACE.	1882.	1881.	1880.	1879.	1878.	1877.	5 years, 1878–1882. Total.	20 years, 1858–1877. Total.
United States	1,500	1,638	1,775	1,511	1,455	1,407	7,879	25,674
Foreign countries	659	623	548	467	493	496	2,790	10,963
American groom, foreign bride	242	244	202	209	181	177	1,078	2,410
Foreign groom, American bride	233	245	244	209	195	202	1,126	2,750
Not stated								64
Total	2,634	2,750	2,769	2,396	2,324	2,282	12,878	41,861

There was a less number of marriages consummated in 1882, by parties who were both groom and bride of native birth, than during any one of the previous three years, the number being 138 less than in 1881, and 275 less than in 1880.

There was at the same time a larger number of marriages of parties who were both foreign born, and about an equal number of mixed marriages, or marriages in which one of the parties was of native birth, and one of foreign birth.

It has been before stated, that there were 116 less marriages in number, in 1882, than in 1881. It will be understood, therefore, from the above exhibit, that the lessened number was entirely in the class of native born population.

In the following Table are given the *percentages* of American, foreign and mixed marriages, in each of the last six years, and in the aggregate of five years, 1878 to 1882 inclusive, and of twenty years, 1858 to 1877 inclusive:

TABLE XXXIII.

BIRTH PLACE.	1882.	1881.	1880.	1879.	1878.	1877.	5 years, 1878-1882.	20 years, Total.
United States	56.95	59.56	64.10	63.06	62.60	61.66	61.25	61.33
Foreign countries	25.02	22.65	19.79	19.49	21,22	21.73	21.63	26.19
Mixed	18.03	17.79	16.11	17.45	16.18	16.61	17.12	12.48
Total	100.00	100.00	100.00	100,00	100.00	100.00	100.00	100.00

By the above Table it will be seen that the percentage of marriages of persons of American birth was smaller than in any one of the previous five years, and also smaller than the average of either of the periods of twenty years, or of five years.

The increase of percentage in the classes of foreign and mixed, will also be noticed.

## AGES OF PERSONS MARRIED.

The number of persons married in Rhode Island, during the year 1882, in the different periods of life, is shown in Table V., on page 8. The number of each sex, in each division of age, can also be found in the following Table:

TABLE XXXIV.

1882.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 to 85.	85 to 90.	Not stated.
Males	57	945	827	350	180	104	58	43	28	24	9	4	3	2		
Females	441	1,180	550	213	121	57	44	14	8	3	2	1				
	-										_	_		-	_	
Total	498	2,125	1,377	563	301	161	102	57	36	27	11	5	3	2	•••	

The number of marriages in 1882, of parties whose ages were largely unequal, was less than the average of previous years. There were several, however, in which the disparity of years was quite considerable.

Two grooms took brides thirty years younger than themselves, there were three grooms with brides thirty-five years younger, three with brides forty and more years younger.

On the other hand, there were four brides with grooms of from fifteen to twenty-five years their juniors.

The whole number of persons, in each division of ages of both sexes, married in Rhode Island, in each of the last seventeen years, that is, from 1866 to 1882 inclusive, is presented in the following Table:

[1883.

# TABLE XXXV.

									-							
YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 to 85.	85 to 90.	Not stated.
1866	693	1,931	1,025	419	213	127	81	59	25	21	12	7			• • • •	23
1867	696	1,886	1,104	416	211	148	91	48	37	18	18	5	3	1		6
1868	644	1,835	1,050	432	219	133	82	61	30	29	11	8	4			32
1869	642	1,814	1,051	468	227	134	79	46	35	15	11	2	3	2		49
1870	744	1,883	1,084	415	216	159	86	64	26	24	12	3	2			6
1871	697	1,914	1,118	392	228	115	73	56	35	22	6	7	3			6
1872	786	2,073	1,182	434	237	131	81	61	43	21	13	6	1			5
1873	762	2,177	1,156	507	253	140	87	68	35	24	12	6	6			27
1874	770	1,992	1,179	459	268	159	101	52	36	39	8	9	1		<b></b>	9
1875	681	2,058	1,108	475	252	150	101	60	32	29	13	4	1			6
1876	691	1,741	1,041	450	224	154	80	53	27	19	12	3	2			9
1877	631	1,745	1,118	459	244	125	92	52	46	14	15	11	2	1		9
1878	618	1,832	1,123	441	259	162	74	49	39	20	17	2	4			8
1879	639	1,879	1,156	481	272	123	78	56	39	26	18	9	2	2	1	11
1880	688	2,301	1,262	556	329	163	91	65	33	27	15	3	3	1		1
1881	599	2,208	1,410	547	298	187	107	54	34	31	16	5	1	1		2
1882	498	2,125	1,377	563	301	161	102	57	36	27	11	5	3	2		

The whole number of persons of both sexes, under twenty years of age, assuming the responsibilities of marriage in 1882, was 498. The percentage is smaller than in any year during the whole period of registration, and the number is also smaller, notwithstanding the increased number of marriages, than in any one of the last seventeen years.

The following summary will show the whole number of marriages, the number of persons married under twenty years of age, and the percentages of marriages of persons under twenty years of age, during two periods of three years each, that is, from 1870 to 1872 inclusive, and from 1880 to 1882 inclusive:

			Percentage of
	Whole number	Number married	persons married
	of persons	under twenty	under twenty
	married.	years of age.	years of age.
1870 to 1873	14,470	2,227	
1880 to 1883	16,306		10.8

It will be seen that the proportion of marriages of minors, under twenty, has decreased about thirty-three per cent., during the last ten years.

The following exhibit will also give the percentages of whole number of persons of both sexes, married under twenty years of age, in different years, taken at random, and will also show the decline in the proportions of the same:

Years.	Married under 20 years of age.
1870	.15.9 per cent. of whole number.
1872	.15.5 per cent. of whole number.
1876	.15.3 per cent. of whole number.
1880	.12.4 per cent. of whole number.
1882	9.4 per cent. of whole number.

The relative proportions of each of the sexes married at different ages may be found on the following pages.

## PROPORTION OF SEX.

The following Table will show the percentages of *males* married, in each division of ages, in each of the last twenty-three years:

TABLE XXXVI.

	YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 & over.	Total.
	1860	5.0	42.8	26.9	16.3	5.7	3.3	100.00
	1861	4.6	44.5	25.4	15.5	5.8	4.2	100.00
	1862	4.2	37.8	27.9	18.3	5.9	5.9	100 00
	1863	3.5	33.0	29.6	17.2	5.8	5.9	100.00
	1864	4.3	38.8	27.3	17.9	7.4	4.3	100.00
	1865	3.5	37.0	28,4	18.9	7.5	4.7	100.00
	1866	5.3	40.9	27.0	16.4	6.3	4.1	100.00
	1867	4.3	40.1	27.9	16.8	6.8	4.1	100,00
	1868	4.1	39.9	28.2	17.1	6.1	4.6	100.00
	1869	4.3	39.6	27.7	18.5	6.1	3.8	100.00
LES	1870	4.3	40.4	28.1	16.0	6.4	4.3	100.00
Ĥ.	1871	5.3	40.1	28.9	16.5	4.9	4.3	100.00
MA	1872	4.3	41.3	28.2	16.6	5.2	4.4	100.00
A	1873	3.8	42.4	26.7	17.0	6.0	4.1	100.00
	1874	4.1	40.4	27.2	17.5	6.4	4.4	100.00
	1875	3.5	40.9	27.8	17.5	6.1	4.2	100.00
	1876	5.1	37.5	28.6	17.9	5.6	4.3	100.00
	1877	4.3	36.0	30.2	18.7	5.9	4.9	100.00
	1878	3.9	38.5	29.0	18.0	6.3	4.3	100.00
	1879	3.9	37.8	28.8	19.3	5.4	4.8	100.00
	1880	3.6	38.9	27.5	19.9	5.8	4.3	100.00
	1881	2.8	37.2	29.7	19.5	6.8	4.0	100.00
	l 1882	2.2	36.0	31.4	20.0	6.1	4.3	100.00

The following Table will show the percentages of females married, in each division of ages, in each of the last twenty-three years:

TABLE XXXVII.

_					ſ	1		=
	YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 & over.	Total.
	ſ 1860	25.8	44.1	17.0	9.1	2.6	1.4	100.00
	1861	29.6	42.0	15.2	7.8	4.1	1.3	100,00
	1862	24.9	41.3	16.7	11.8	4.1	1.2	100.00
	1863	24.9	42.6	16.9	9.8	4.1	1.7	100.00
	1864	24.2	43.4	17.8	10.3	2.9	1.4	100.00
	1865	22.6	42.3	19.1	11.0	3.5	1.5	100.00
	1866	24.7	42.9	17.4	11.0	2.7	1.3	100.00
	1867	25.4	40.5	19.3	10.0	3.4	1.4	100.00
	1868	24.4	40.9	18.1	11.6	3.3	1.7	100.00
w.	1869	24.1	40.5	18.7	12.1	3.4	1.2	100.00
FEMALES	1870	26.8	39.4	17.9	10.S	3.9	1.2	100.00
4	1871	24.6	41.9	19.1	10.1	3.1	1.2	100.00
M	1872	26.7	40.5	18.4	9.9	3.2	1.3	100.00
FF	1873	25.3	40.8	17.5	12.0	2.7	1.7	100.00
' '	1874	26.3	38.1	19.3	11.1	3.9	1.3	100.00
	1875	23.9	42.1	16.8	11.S	4.0	1.4	100.00
	1876	25.6	39.8	17.6	12.0	3.7	1.3	100.00
	1877	23.4	40.4	18.8	12.1	3.6	1.7	100.00
	1878	22.7	40.4	19.3	12.2	3.8	1.6	100.00
	1879	22.8	40.7	19.4	12.1	3.0	2.0	100.00
	1880	21.1	44.2	18.0	12.0	3.3	1.4	100.00
	1881	19.0	43.0	21.5	11.2	3.8	1.5	100.00
	1882	16.7	44.8	20.9	12.6	3 9	1.1	100.00

Tables XXXVI. and XXXVII. are instructive, in that they show the changes that have taken place in the percentages of the sexes, married in the different divisions of age, during the last twenty-three years.

In Table XXXVI. it will be seen that the proportion of males married, under 20 years of age, has gradually lessened, with only temporary interruptions, from 5.0 per cent. of the whole number of males married, in 1860; to 2.2 per cent. of the same class married in 1882, or a proportion of less than half as many.

The proportion of males, between twenty and twenty-five, has not largely changed.

The proportion of males, married in every division of age above twenty-five, has therefore gradually increased through the same series of years, with only temporary interruptions, standing in 1882 at nearly 62 per cent. of the whole number, as against 52 per cent. in 1860:

In Table XXXVII. it will also be seen that the proportion of females married, under twenty years of age, has been, with few exceptions, gradually lessening during the period of twenty-three years. From a proportion of 25.8 per cent., or more than one-quarter of the whole number of females married in 1860, the proportion married under twenty was reduced to 16.7 per cent. in 1882.

As in the case of males, the postponement of matrimonial responsibilities to a more mature age seems also to be growing in prevalence among females.

Doubtless the largely increased change during the last year and a half has been aided considerably by the marriage law recently amended, which requires a certificate of consent in writing from the parent or guardian, to the marriage of any minor.

# MARRIAGES OF PERSONS OF COLOR.

The number of marriages of persons of color, in Rhode Island, in 1882, was 74. This includes six marriages of which one of the parties was white. The number and color of individuals were, therefore, 142 persons of color, and 6 persons white. The white persons were all females. The marriages, however, may be properly classed as colored marriages.

The number reported during 1882, from the different towns, was as follows, viz.:

	ng 5 of white and black)	
Newport		. 4
East Greenwich (inc	cluding 1 of white and black)	. 3
South Kingstown,	0	
Westerly,	- 2 each	. 4
Bristol,		
Warwick,		
Portsmouth,		
North Kingstown,		
Richmond,	1 each	10
Cranston,	1 each	. 10
Pawtucket,		
Scituate,		
Smithfield,		
Woonsocket.	j	_
Total		. 74

## MARRIAGES OF THE DIVORCED.

The number of marriages, of which one or both of the contracting parties had been divorced, is probably somewhat larger than the number given below.

The following exhibit will name the towns from which returns of marriage with the item of divorce was given, the whole number of divorced persons married, and also the sex and number of marriage of the divorced:

TOWNS.	Whole Number.	Groom.	Bride.	Second Marriage of Groom.	Third Marriage of Groom.	Second Marriage of Bride.	Third Marriage of Bride.
Coventry	6	3	3	3		3	
East Greenwich	7	2	5	2		5	
Lincoln	1		1			1	
Smithfield	5	3	2	3		2	
Woonsocket	5	2	3	2		3	
Pawtucket	17	4	13	4		13	
Providence	78	33	45	30	3	43	2
Westerly	2		2			2	
State	121	47	74	44	3	72	2

Of the 121 divorced persons who were married in 1882, according to the returns, there were 34, of whom each married a divorced person (17 marriages where both groom and bride had been divorced), and 87 who married undivorced persons.

# DIVORCES, 1882.

The number of applications for divorce in Rhode Island, during the year 1882, as ascertained by reports from the clerks of the supreme courts of the different counties, was (339) three hundred and thirtynine. The number in 1880 was (347) three hundred and forty-seven; and in 1881 it was (350) three hundred and fifty.

During the year 1882, there were (271) two hundred and seventyone applications for divorce granted, which were eight more than in 1880, and three more than in 1881.

The following Table shows the number of applications for divorce, and the number granted, in 1882, in each county of the State; also the causes alleged for the applications.

TABLE XXXVIII.

			CAUSES ALLEGED.										
COUNTIES.	Number of Applications.	Number of Applications.	Number of Applications.	Number Granted.	Adultery.	Extreme Cruelty.	Wilful Desertion.	Continued Drunkenness.	Neglect to Provide Necessuries, &c.	Other Gross Misbehavior.	Another Wife Living.	Impotency.	Total Causes Alleged.
Bristol	8	6	1	1	4	4	5	5			20		
Kent	19	18	4		6	1	7		1		19		
Newport	17	15	3	3	5		11				22		
Providence	281	221	62	53	184.	55	157	43		4	558		
Washington	14	11	2	2	6	1	5	14			30		
							-						
Whole State	339	271	72	59	205	61	185	62	1	4	649		

In the three hundred and thirty-nine applications for divorce which were presented in 1882, the whole number of causes alleged for the same was six hundred and forty-nine.

It will be seen that in a majority of cases more than one cause is alleged why divorce should be granted, and in some applications quite a number of reasons are specified.

Of the 649, the total of all causes alleged, 72, were because of adultery; 59, for extreme cruelty; 205, for wilful desertion; 61, for continued drunkenness; 185, for neglect to provide the necessaries of life; 62, various forms of gross misbehavior; 4, for impotency; and one because the supposed husband had a previous undivorced wife living, which if true would make the marriage void, and no divorce be needed.

As may be supposed, there is doubtless collusion often between the parties to a divorce suit, but this cannot always be known to the Judges of the Supreme Court before whom the cases are tried, and a decree of divorce must be entered in accordance with the evidence presented.

In order to show the actual number of applications, and the number of divorces granted in each of the last ten years, the following summary is presented:

			Applications
	Applications	Divorces	refused or continued
	for Divorce.	Granted.	or withdrawn.
1873	261	173	88
1874	276	242,	34
1875	227		69
1876	254		58
1877		178	
1878	258	196	62
1879	255	246	9
1880	347	273	74
1881	350		92
1882	339	271	
10 years total	2,824	2,201	

The proportion of divorces granted, to whole number of applications during the last ten years, is 77.9 in each 100.

The number of applications for divorce, in Rhode Island, increase from year to year with only slight fluctuations.

The proportion of petitions for divorce granted in 1881 was 80, per cent. of the applications made during the same year. This proporportion is 3.5 per cent. larger than that of 1881.

The ratio of divorces granted in 1881, to whole number of marriages during the year, was one divorce to every 9.7 marriages.

The ratio of applications for divorce to the whole number of marriages during the year, was one application to less than every eight marriages.

The following Table shows the number of divorces granted in each county, and in the whole State, in each of the last fourteen years, with the proportion of marriages to each divorce granted in each year:

TABLE	XXXIX.

		stol		ent nty.		port nty.		dence	Washington County.		Wl Sta	ite.
YEARS.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.
1869	10	10.6	15	12.5	6	27.7	120	13.8	11	15.5	162	14.1
1870	3	27.7	18	11.8	6	26.3	152	11.3	21	9.3	200	11.8
1871	5	16.8	11	17.9	4	49.7	123	13.3	18	11.4	161	14.5
1872	8	10.2	13	15.7	8	22.9	149	12.6	22	8.9	200	12.7
1873	6	16.2	22	9.8	8	21.9	131	14.8	6	33.7	173	15.2
1874	10	8.9	20	⇒8.0	6	29.0	190	10.0	16	11.6	242	10.5
1875	2	50.0	18	8.8	7	23.4	120	14.9	11	20.5	158	15.7
1876	6	14.5	15	12.8	7	20.5	148	11.1	20	8.8	190	11.5
1877	7	12.0	9	16.3	7	26.0	134	12.4	21	9.9	178	12.8
1878	4	26.0	11	13.3	13	12.8	156	10.9	12	17.3	196	11.9
1879	5	18.8	19	9.0	7	24.1	195	9.1	20	9.7	246	9.7
1880	8	12.1	23	9.4	11	17.6	208	9.7	23	17.0	273	10.1
1881	6	20.1	26	7.3	10	16.9	207	10.0	19	11.0	268	10.4
1882	6	15.0	18	10.3	15	13.0	221	8.9	11	16,2	271	9.7

It will be seen, by the above table, that the proportion of divorces granted in the whole State, in 1882, to the number of marriages the same year, was slightly larger than in the previous year.

The proportion for the State was the same as in 1879. In these two years were the largest proportions of divorce to marriage of any on record.

There was an increase of proportion in Bristol, Newport and Providence counties only.

In Providence county, the proportion of about one divorce to every 9 marriages, in 1882, was 4 per cent. larger than the average of the previous thirteen years.

During fourteen years, the average proportions of divorce to marriage in the several counties and the State, have been as follows:

Bristol Countyone divorce to every 18.5 marriages.
Kent Countyone divorce to every 11.6 marriages.
Newport County one divorce to every 23.7 marriages.
Providence Countyone divorce to every 11.6 marriages.
Washington Countyone divorce to every 14.3 marriages.
Whole Stateone divorce to every 12.2 marriages.

It will be seen, that in a series of years, Newport county has furnished the least number of divorces in proportion to the number of marriages, and Providence and Kent counties the largest number.

The tendency has been to a gradual increase of the proportion of divorce to marriage.

During the three years from 1869 to 71 inclusive, the proportion was one divorce to every 13.5 marriages. From 1872 to 1876 inclusive it was one divorce to every 13.1 marriages; and from 1877 to 1881 inclusive it was one divorce to every 11 marriages.

# DEATHS, 1882.

There were received at the office of the State Registrar of Vital Statistics, the returns of five thousand and seventy-four (5,074) deaths, as having occurred in Rhode Island during the year 1882.

This number, although the largest ever recorded in any one year, is but slightly in excess of the number in 1881, that is, by 58 only.

Considering the large number of births that were returned as having occurred during that and the previous year, and the regular large mortality every year of children under one year of age, it is apparent that some of the prominent causes of death, especially such as are largely confined to children of tender age, did not have so large prevalence in 1882 as in some of the previous years. This is quite true of croup, diphtheria and scarlatina. Cholera infantum and typhoid fever were, however, rather more prevalent in some localities than in some previous years, and numbered a larger mortality.

The ratio of mortality to population was one death in every 54.5 persons, or 18.3 in each thousand inhabitants, according to the census of 1880.

This ratio is larger than the real proportion, because of the increase of population since 1880. As remarked on another and previous page, "Estimating the population of the State at 295,000 in June, 1882, the proportion of deaths to population during the year was 17.2 in each thousand, which was about the average of the previous five years."

#### SEX OF DECEDENTS.

Of the 5,074 persons whose deaths were returned, during the year 1882, 2,487 were males, and 2,587 were females; the ratio standing at 96.54 males to each 100 females, or 49.00 males and 51.00 females in each 100 decedents.

The following Tables, XL. and XLI., show the number and proportion of males and females among the *decedents*, and also among the *children born* in Rhode Island during the ten years 1853 to 1862 inclusive; also in each of the twenty years from 1863 to 1882 inclusive, and for the entire period of thirty years:

## TABLE XL.

	10 years, 1853-1862	10,930	males		.11,269	femalesor	96.9	males	to	100	females.
	1863	1,621	males		. 1,586	femalesor	102.2	males	to	100	females.
	1864	1,633	males		. 1,727	females or	94.5	males	to	100	females.
	1865	1,686	males		. 1,719	femalesor	98.1	males	to	100	females.
	1866	1,497	males		. 1,473	femalesor	101.5	males	to	100	females.
	1867	1,442	$_{\mathrm{males}}$		. 1,447	femalesor	99.7	males	to	100	females.
	1868	1,413	males		. 1,499	femalesor	94.3	males	to	100	females.
	1869	1,696	males		. 1,686	femalesor	100.6	males	to	100	females.
	1870	1,588	males		. 1,650	females or	96.2	males	to	100	females.
S	1871	1,621	males		1,723	femalesor	94.1	males	to	100	females.
THE	1872	2,118	males		. 2,129	femalesor	99.4	males	to	100	females.
A.	1873	2,166	males		. 2,237	femalesor	95.5	males	to	100	females.
E	1874	2,111	males		2,118	femalesor	99.7	males	to	100	females.
A	1875	2,108	$_{ m males}$		. 2,209	females or	95.4	males	to	100	females.
	1876	1,969	males		2,147	females or	91.7	males	to	100	females.
	1877	2,132	males		2,318	femalesor	92.0	maies	to	100	females.
	1878	2,161	males	· · · · · · · ·	2,280	females or	94.8	males	to	100	females.
	1879	2,183	males		2,289	femalesor	95.4	males	to	100	females.
	1880	2,366	males		2,463	femalesor	96.0	males	to	100	females.
	1881	2,467	males		2,559	femalesor	96.8	males	to	100	females.
	1882	2,487	males		2,587	femalesor	96.5	males	to	100	females.
	30 years	49,395	males		51,105	females or	96.6	males	to	100	females.

# TABLE XLI.

-									
ſ	10 years, 1853-1862.	. 18,377	males	17,260	femalesor	106.4	males	to 10	0 females.
	1863	. 1,892	males	1,788	femalesor	105.8	males	to 10	0 females.
ļ	1864	. 1,949	${\rm males}$	1,942	femalesor	100.3	$_{\mathrm{males}}$	to 10	0 females.
	1865	. 2,096	males	1,857	femalesor	112.9	males	to 10	0 females.
	1866	. 2,546	males	2,356	females or	108.1	males	to 10	0 females.
	1867	. 2,655	males	2,464	females or	107.7	males	to 10	0 females.
1	1868	. 2,745	males	2,627	femalesor	104.5	males	to 10	0 females.
	1869	. 2,685	males	2,560	femalesor	104.9	males	to 10	0 females.
	1870	. 2,679	males	2,536	femalesor	105.6	males	to 10	0 females.
	1871								
HES	1872								
	1873								
- 2	1874								
— i	1875								
71	1876								
	1877								
- 1	1878								
- 1	1879								
	1880								
- 1	1881								
	1882								
						200,0			
į	30 years	76,758	males	72,582	femalesor	105.7	males	to 10	) females.

Table XL. may be presented differently, that is, in three periods of ten years each, and one of thirty years, as follows:

DEATHS.	Males.	Females.		
10 years, 1853-1862	10,930	11,269 or	96.9 males to each	100 females.
10 years, 1863-1872	.16,315	16,639or	98.0 males to each	100 females.
10 years, 1873-1882	.22,150	23,197or	95.6 males to each	100 females.
_				
30 years, 1853-1882	49,395	51,105or	96.6 males to each	100 females.

BIRTHS.

It will be seen that the results of thirty years registration show that, while there have been 105.7 male children born to each 100 female children, there have been only 96.6 male decedents to each 100 female decedents.

There is, nevertheless, a larger female population in Rhode Island than of the male population, which goes to prove clearly that either the emigration of males is larger than that of females, or that the immigration of females is larger than that of males. Both propositions are to some extent doubtless true.

## SEASON AND MORTALITY.

The whole number of decedents, and the sex of the same, in each month of the year 1882, and in each division of the State, may be found in Table VI., on the seventeenth page.

The influence of season upon mortality may be further illustrated by the following Table, which shows the number and percentage of deaths in each quarter of each of the last five years, and in the aggregate for the twenty-five years from 1853 to 1877 inclusive:

TABLE XLII.

		1882. 1881.		81.	1. 1880.		1879.		1878.		1853–1877.	
SEASON.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
January-March	1,180	23.23	1,236	24.62	1,216	25.18	1,185	26.49	1,158	25.87	17,646	22.16
April-June	1,186	23.24	1,171	23.34	1,149	23.80	939	20.99	968	21.81	16,513	20.74
July-September	1,443	28,42	1,424	28.38	1,306	27.04	1,174	26.26	1,175	26.46	23,464	29.46
October-December	1,265	25.11	1,185	23.66	1,158	23.98	1,174	26 26	1,140	25.86	22,006	27.64
Total	5,074	100.00	5,016	100.00	4,829	100.00	4,472	100.00	4,441	100.00	79,629	100.00

It will be seen, by Table XLII., that the mortality in Rhode Island, in 1882, was greater in the third quarter than in any one of the previous four years, although more than one per cent. less than the average of twenty-five years previous to 1878. The results of registration in 1882 show that diarrheeal diseases prevailed more largely and more severely during July and August of that year than usual, or rather than during the previous four or five years.

Pneumonia and other diseases of the respiratory organs were largely prevalent, and unusually fatal, during the spring months, but, taking the first half of the year, the mortality from all causes was hardly equal to the average of the previous four years.

#### SEASON AND DEATH RATE. CITY INFLUENCE.

It has been the custom, in former reports, to contrast the city of Providence, which comprises more than three-eighths of the entire population of the State, with the rest of the State, in regard to the influence of season upon mortality.

The following Table will present a comparison between the city and the rest of the State, in relation to the mortality of each section by seasons. It will show the number and percentage of deaths in each quarter of the year 1882 in the city, and in the rest of the State separately; and the number and percentage of deaths in each quarterly period in the city of Providence, for six years, that is, from 1876 to 1881 inclusive; and the number and percentage in the rest of the State, also for each quarter of the same period of six years:

TABLE XLIII.

		188	32.		1876-	-1881.	1876-1881.	
	Provid	lence.	Rest of	State.	Provi	dence.	Rest of	State.
SEASON.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
January-March	528	23.55	652	23.02	2,936	24.3S	3,743	24.50
April-June	506	22.57	680	24.01	2,811	23.34	3,316	21.70
July-September	581	25.92	862	30.43	3,248	26.97	4,397	28.77
October-December	627	27.96	638	22.54	3,048	25.31	3,825	25.03
Total	2,242	100.00	2,832	100.00	12,043	100.00	15,281	100 00

A very considerable difference will be seen between the proportions of the city of Providence and of the rest of the State, in the third and fourth quarters of 1882. The proportion of 30.4 per cent. of all the deaths in any year occurring during the third quarter is quite remarkable, if not unprecedented. That proportion occurred in that part of the State outside of Providence city, while in the city the proportion for the same quarter was only 25.9 per cent. In Providence city the proportion was about one per cent. less than the average of several previous years.

In the last quarter of the year 1882 the proportion of the city, 28.0 per cent., was considerably larger than the average of previous years, while that of the rest of the State for the same quarter, 22.5 per cent., was considerably less than the average of previous years. An unprecedentedly large prevalence of typhoid fever in Providence city during the last quarter, and especially during the month of November, contributed largely to the increased mortality during that quarter.

## MORTALITY BY MONTHS.

On the following page may be found a presentation of months in the order in which occurred from the largest to the smallest number of deaths, in the whole State, during each of the last eight years:

PABLE XLIV

Showing the months in the order of largest mortality for eight years.

•	471	6119	365	363	358	357	354	3.16	315	333	314	502	1	4,317
1875.	Angust	September 419	February 392	January 363	December 358	November	July 354	March 346	October 345	May 333	April	June		
1876.	Angust, 469	July 444	December 348	March 341	September 336	October 334	May 332	343 April 329	Pebruary 312	January 295	November 395 April 314	June 381		4,116
1877.	September 454 Angust 469 Angust	Angust 450 July 444	October 430	July 413	December 411	November 398 October 334	March 347 May 333	May	September 345 January 323	April 310 January 295	June 305	May 308 Pedyraary,, 266 June 281 June 265		4,450
1878.	576 July 488 danuary 468 December 421	August 430	July 410 October, 430 December	January 400	March 396 December 411 September 336	November 377	February 362	April 350	September 345	October 312	June 310 June 305			4, 141
1879.	January 468	August 452	December 395	October 391	November 388	July 383	March 382	April 312	September 339	February 368 February 335	May 318	June 379		4,172
1880.	July 488	Angust 430 Angust 452	March 426	January 423	October 416	April 400	May 392	September 388	377	February 368	November 365	June 357		4,839
1881.	August 576	November. 461 January 439	September, 411 July 434	1. July 410 October 425 January 422 October 391 January 400 July 413	5. May 406 April 417 October 416 November 388	6. December., 405 September 414 April 400 July 383	7. April 401 May 410 May 392	March 401   September 388   April 312	February 396 December	December 385	November 374	12. June 379 June 314 June 357 June 279		5.016
1882,	1. Angust 589 Angust	9. November, 461	3. September, 411	1. July 410	5. May 406	6. December., 405	7. April 401	8. October 399	9. January 398	0 February 392	11. March 390	2. June 379		5,071

Previous to 1877, for a period of several years, August was the first month in the order of contributing the largest number of decedents, and then took the second place for four years, resuming its position again at the head of the list in 1881, and continuing in 1882.

It will be seen that there was a change in the heading of the list every year during the five years preceding 1882.

#### PARENTAGE OF DECEDENTS.

The whole number of decedents reported in Rhode Island, in 1882, was 5,074, of which 2,429 were of American parentage, and 2,645 were of foreign parentage. The parentage was reckoned according to the reported nativity of the fathers.

The parentage of the decedents in the two classes of American and foreign, as reported from the different towns in the State may be found in the general abstract for 1882, on the 10th and 11th pages.

For the first time during the whole period of registration in Rhode Island, the decedents of foreign parentage exceeded, in 1881, the number of decedents of American parentage. The same occurrence was repeated in 1882, with increased proportion of foreign parentage. In Table XLIV. these facts will be clearly shown by the statistics.

In 1881 there were 102.1 decedents of foreign parentage to each 100 of American; and in 1882 there were 108.9 decedents of foreign parentage to each 100 of American.

The term "foreign parentage," as here used, is to be understood as including only those whose parents were foreign born, and not those whose parents were born in the United States, although those parents were children of foreign born parents.

There are but few towns in the State, which do not report every year some decedents of foreign parentage.

The towns not reporting such, during 1882, are Jamestown, Little Compton, Middletown and Charlestown.

The towns reporting less than four decedents of foreign parentage are towns of small population, as follows: Barrington, West Greenwich, New Shoreham, Foster, Exeter and Richmond.

There were nine towns which returned a larger mortality of persons of foreign parentage than of American. These nine towns were all in Providence county.

The nine towns alluded to, in Providence county, reported deaths in the two classes of parentage in the proportions presented as follows:

Burrillville	American.
Cranston	American.
Cumberland	American.
Johnston	American.
Lincoln	American.
North Smithfield241 of foreign parentage to each 100 of A	American.
Pawtncket	American.
Woonsocket	American.
Providence City	American.

The following Table gives the number and percentage of decedents of American and of foreign parentage, in each of the last five years; and in the aggregate for twenty-two years, or from 1858 to 1879 inclusive:

	188	1882. 1881.		1. 1880.		1879.		1878.		1858–1879.		
PARENTAGE.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
American	2,429	47.87	2,482	49.48	2,517	52.13	2,294	51.29	2,281	51.36	52,332	56.25
Foreign	2,645	52.13	2,534	50.52	2,312	47.97	2,178	48.71	2,160	48.64	40,702	43.75
Total	5,074	100.00	5,016	100.00	4,829	100.00	4,472	100.00	4,441	100.00	93,034	100.00

TABLE XLV.

The gradual increase of mortality, in the population of foreign parentage, can be distinctly traced by reference to Table XLV.

In studying the question of mortality by parentage it may be well, also, to refer to remarks and Tables on page 76 and sequel, in relation to births by parentage. Both questions are considered at greater length in the Twenty-ninth Registration Report, on pages 70 to 74 inclusive, and 102 to 103 inclusive.

#### AGE OF DECEDENTS.

There may be found in Table I., on pages 10 and 11, the aggregate and average age of all the decedents reported in 1882, of each sex, in each town and county in the State.

It will be seen, by that Table, that the average age of all the male decedents in 1882 was 31 and one-third years, and the average age of all the female decedents, in the same year, was 35 and one-half years.

The average age at death, in 1882, was slightly more advanced, in both sexes, than in 1881.

The following summary will show the average age of each of the sexes, and of all, in each of the last five years:

	1882.	1881.	1880.	1879.	1878.
	Average.	Average.	Average.	Average.	Average.
Males	31.33 years	30.99 years	29.62 years	31.29 years	29.02 years.
Females	35.57 years	34.07 years.	32.06 years	33.24 years	31.11 years.
Ages of al	133.50 years	32.55 years	30.86 years	32.29 years	30.00 years.

The highest average age of male decedents, in any town in the State, in 1882, was 70.25 years, in Jamestown; the highest average age of female decedents was 75 years, in Charlestown.

The lowest average age of male decedents, during the same time, was 16.41 years, in North Smithfield, and the lowest average age of female decedents was 16.75 years, in North Providence.

Various circumstances may occur during any one year, or in occasional years, to raise or lower the average age of the decedents in any town, and more especially towns of small population, and dependence therefore on the results of any single year, are fallacious as regards any definite conclusions therefrom.

And there are circumstances other than that of the salubrity of towns, that contribute to the advanced average age of decedents; as a low birth rate, for instance, naturally the result of the emigration of a considerable proportion of the population, during early manhood and womanhood, to other towns, where labor secures more remunerative employment.

Nevertheless, when the results of a series of years are aggregated and averages made, a basis is obtained for approximate conclusions as to the relative longevity of the inhabitants of any town furnishing such statistics.

For a ready reference the following Table, continued from a previous report, will show the whole number of deaths, the average annual percentage of deaths to estimated average population, and average age of all decedents during ten years, from 1870 to 1880, in each town and in each county in the State.

It should be stated that, in estimating the average population during the period of ten years, corrections were made for losses by division of territory, and also for gains of population by addition of territory, where such changes had occurred.

It may be stated, also, that changes in the character of the population in some of the towns, during the last half of the ten years, seemed to have an influence in the direction of increase of the death rate in those towns.

## TABLE XLVI.

		DEA'	THS.	
TOWNS AND DIVISIONS		A warners to		
OF THE STATE.	Whole No. Deaths, 10 years.	Average to population one in every	Per cent.	Average Age of all,
Barrington. Bristol Warren.	142 904 656	83.45 64.37 61.05	1.19 1.55 1.64	43.12 34.66 31.98
BRISTOL COUNTY	1,702	64.74	1 54	33.77
Coventry. East Greenwich West Greenwich. '. Warwick.	672 500 177 1,461	68.15 62.40 58.42 79.49	1.47 1.63 1.71 1.26	40.77 40.17 45.78 29.15
KENT COUNTY	2,810	72.41	1.38	35.29
Jamestown Little Compton Middletown New Shoreham Portsmouth Tiverton	42 140 124 111 216 285	116,19 82,57 86,61 103,33 87,64 73,72	.86 1,21 1,15 .96 1,14 1,36	51.62 53.69 45.03 37.39 47.32 43.05
Towns, Newport County	918	85.61	1.17	45.66
NEWPORT CITY	2,041	68.73	1.45	36.51
NEWPORT COUNTY	2,959	73.97	1.35	39.35
Burrillville Cranston‡. Cumberland East Providence Foster. Gloeester. Johnston. Lincoln* North Providence† North Smithfield* Pawtucket. Scituate. Smithfield*. Woonsocket.	677 1,045 640 592 151 335 745 1,575 113 322 2,062 2,062 421 2,628	77.53 54.43 88.64 73.24 102.20 62.03 67.10 55.21 69.18 78.17 55.22 74.97 67.86 51.66	1.29 1.82 1.13 1.36 98 1.61 1.49 1.81 1.45 1.26 1.82 1.47 1.92	33.92 37.72 30.56 28.26 53.14 44.93 30.94 22.14 29.60 32.15 29.81 40.39 36.12 24.49
Towns, Providence County	13,440	62,68	1.59	29.15
Providence City	17.587	50.24	1.99	27.76
PROVIDENCE COUNTY	31,027	59.60	1.67	28.37
Charlestown. Exeter. Hopkinton North Kingstown. South Kingstown. Richmond Westerly.	159 392 553 602 299	69.80 85.22 70.41 63.38 70.43 58.46 89.68	1.42 1.17 1.42 1.58 1.41 1.71 1.11	54.33 51.58 40.78 40.76 43.99 38.18 34.66
WASHINGTON COUNTY	2,759	72.71	1.37	40.5
WHOLE STATE	41,257	62.59	1.59	30.68

An increased birth rate has generally been held to imply the necessary corollary of an increased death rate, and by the large mortality of children under five years of age, a necessary lowering of the average age of decedents.

It would seem, however, by the vital statistics of Rhode Island, that

<sup>\*</sup> Nine years.

<sup>†</sup> Six years.

<sup>#</sup> Including deaths in State Institutions.

although the birth rate has increased somewhat in the State, the death rate remains about the same, and the average age of decedents has slightly increased.

Providence city, also, while the birth rate and death rate have remained about the same, has also had an increase in the average age of its decedents.

The following summary will show the average age of the decedents in the city, during the last five years:

	1882.	1881.	1880.	1879.	1878.
	Average.	Average.	Average.	Average.	Average.
Males	30.04	28.55	28.72	28.09	24.22
Females	33.58	33.30	30.45	29.54	27.88
Age of all	31.88	30.98	29,67	28.82	26.09

The following will show the average age of the decedents in Providence city and in the whole State, during each of the last three years, and also the average of a period of ten years previous to 1880:

				Ten Years.
	1882.	1881.	1880.	1870-1879.
	Average.	Average.	Average.	, Average.
Providence City	31.9	30.9	29.7	27.7
Whole State	33.5	32.5	30.9	30.6

The following Table shows the average age of the decedents in each of the larger divisions of the State, in each of the last five years, and also the average of each of four periods of five years each, comprising the twenty years from 1858 to 1877 inclusive:

TABLE XLVII.

Divisions of the State.	1882.	1881.	1880.	1879.	1878.	1873-1877. 5 years.	1868–1872. 5 years.	1863-1867. 5 years.	1858–1862. 5 years.
Bristol County	39.31	37.74	36.43	40.87	29.08	83.61	35.12	34.78	35.56
Kent County	39.73	34.46	36.54	35.15	33.68	36.20	34.77	35.81	32.15
Newport County	37.00	40.03	42.38	37.62	39.06	40.68	40.04	33.54	35.01
Providence Co., Towns	31.83	30.35	27.40	32.45	30.98	28.46	25.26	29.16	28.44
Providence City	31.88	30.98	29.67	28.82	26.09	27.19	25.45	28.50	25.78
Washington County	40.32	41.13	37.82	43.44	42.34	41.14	39.67	30.87	34.21
Whole State	33,50	32,55	30.86	32.29	30.09	30.28	31.66	30.75	29.42

Table XLVII. shows how the average age of decedents varies from year to year, in the different sections of the State. There was a falling off in 1882, as compared with the previous year, in Newport and Washington counties, and an increase in all the other divisions.

#### PERCENTAGE OF DECEDENTS BY DIFFERENT AGES.

In Table VII., on pages 18 to 23 inclusive, will be found the number of deaths in 1882, in each town and each county, of each sex, and in each period of life, with the percentage of the whole number of deaths in each division to the population of the same, by the census of 1880.

The following Table shows the percentages of decedents in each division of ages to whole number of deaths, in each of the last six years, and in the aggregate for three periods; one of ten years and seven months, from June 1st, 1852, to December 31st, 1862, inclusive; one of ten years, from 1863 to 1872 inclusive; and one of ten years, from 1873 to 1882 inclusive:

TABLE XLVIII.

PERIODS OF LIFE.	1882.	1881.	1880.	1879.	1878.	1877.	10 years. 1873 to 1882.	10 years, 1863 to 1872.	10 years, 7 months. 1852 to 1862.
Under 1 year	19.7	18.5	18.4	16.1	16.6	17.4	18.9	18.0	17.6
1 and under 2	5.3	6.4	7.0	6.8	8.1	8.1	7.6	7.8	9.8
2 and under 5	5.5	7.9	9.2	10.1	10.3	9.5	8.4	7.9	9.6
Total under 5	30.5	32.8	34.6	33.0	35.0	35.0	34.9	33.7	37.0
5 and under 10	3.7	4.6	6.2	6.3	6.2	6.2	5.0	4.6	5.0
10 and under 20	5.8	5.2	4.8	4.8	6.1	5.4	5.8	6.2	5.8
20 and under 30	10.6	9.6	8.6	8.8	8.8	8.9	9.2	9.7	9.5
30 and under 40	9.3	8.0	7.6	7.4	7.6	7.5	7.8	8.1	8.7
40 and under 50	7.6	7.6	6.6	6.5	6.4	6.6	6.9	7.2	7.5
50 and under 60	7.3	8.2	6.7	7.1	7.6	7.2	7.2	7.3	6.7
60 and under 70	8.4	8.8	8.5	10.0	7.9	8.8	8.2	8.3	6.9
70 and under 80	9.7	8.6	9,4	9.0	8.8	9.5	8.8	8.4	7.3
80 and under 90	5.6	5.4	5.7	5.5	4.8	4.0	5.1	5.4	4.6
Over 90 and not stated	1.5	1.2	1.3	1.6	0.8	0.9	1.1	1.1	1.0
Total	100.0	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0

In the Twenty-Ninth Registration Report it was stated that the proportion of deaths under five years of age, in 1881, was smaller than in 1880, and also, with scarcely an exception, smaller than in any previous year during registration in the State. The proportion of deaths in that period of life, during the thirty years and seven months of registration, was 35.2 per cent. of all, and in 1881 it was 32.8 per cent. of all.

It will be seen, by Table XLVIII., that the proportion of decedents under five years of age was even smaller, in 1882, than in the previous year. It will also be noticed that nearly two-thirds of the decedents under five were deaths of children under one year of age. These

proportions are quite unusual, if not unprecedented.

It was stated, on a previous page, that some of the prominent causes of death, especially such as are largely confined to children in very early life, did not prevail so largely, in 1882, as in some of the previous years. This was particularly true of croup, diphtheria and scarlatina, which find very much the largest number of victims among children between one and five years of age. But cholera infantum, which is so very largely confined to children under one year of age, was much more prevalent in 1882 than in several previous years, and will account for the large proportion of decedents in that period of life.

It will be seen, also, that the proportion of decedents between five and ten years of age was smaller than usual, and the proportion

between twenty and thirty was unusually large.

During 1882, considerably more than one-third of all the deaths caused by consumption were of persons between twenty and thirty years of age, and nearly one-third of all the deaths caused by typhoid fever were of persons of the same period of life.

## COLORED DECEDENTS.

There were 145 deaths of persons of color reported in Rhode Island in 1882.

That is the smallest number of colored decedents returned in any year since 1871.

The number in 1881 was 186.

They occurred in the different towns as follows:

The state of the s
Providence City
Newport City. 22
Cranston
" State Almshouse
South Kingstown. 6
Hopkinton. 3
East Greenwich, New Shoreham, Pawtucket.  6 Pawtucket.
New Shoreham, 2 each
Pawtucket.
Bristol, Warren. 1 each. 2
Warren.)
Total

Sex.—There were, of the 145 decedents of color, 76 males and 69 females.

Season.—These 145 deaths were in the different months as follows:

Months.	Deaths.	Months.	Deaths.	Months.	Deaths.	Months.	Deaths.
January	9	April	11	July	9	October	12
February	9	May	15	August	17	November.	15
March	8	June	9	September	14	December.	17
			p. 100 mg		amon		B. 0.000
1st Quarter	26	2d Quarter	35	3d Quarter	40	4th Quarte	r 44

First six months, 61; second six months, 84. Total, 145.

Age.—The average age of the colored decedents in Rhode Island, in 1882, was as follows:

	Ma	ales.	Females.
Providence City		years	32.9 years.
Rest of State		years	.33.0 years.
Whole State	31.0	years	33.0 years.
Avera	age of all	31.9 years.	

## SUMMARY OF COLORED POPULATION: INCLUDING ALL NATIVITIES.

The number of births, marriages and deaths among the colored population of Rhode Island, in the several divisions of the State, in 1882, is given in the following Table, compared with the colored population in each division, as found by the United States Census of 1880:

TABLE XLIX.

	ü,	BIRTHS, 1882.			RIAGES,	DEAT	ня, 1882.
COUNTIES.	Colored Population, 1880.	Number.	To population, one birth in every	Number.	Of population, one person married in every	Number.	Of population, one death in every,
Bristol County	209	6	34.8	1	104.5	2	104.5
Kent County	330	15	22.0	4	41.2	2	165.0
Newport County.	1,129	40	28.2	5	112.9	24	50.3
Providence County, Towns	496	11	45.1	5	49.6	13	38.1
Providence City	3,646	96	38.0	53	34.4	95	38.4
Washington County	782	11	71.1	6	65.1	9	87.0
Whole State	6,592	179	36.8	74	44.5	145	45.4

The proportion of each of these events to the colored population was less, in 1882, than in the previous year, and nearer the average of the half dozen years previous to 1881.

The following summary will show the proportions of the last five years:

	One birth	One person	One death
	in every	married in every	in every
1878	36.4		40.2
1879	39.6	51.4	37.3
1880	47.1	43.3	44.0
1881	34.3		35.4
1882	36.8	44.5	45.4

The difference in the proportions of the events of birth, marriage and death to population, between the white and colored race in 1882, may be seen in the following summary:

White.....One child born in every 41.6; one person married in every 54.0; one death in every 56.1 Colored....One child born in every 36.8; one person married in every 44.5; one death in every 45.4

Whole No white and One child born in every 40.5; one person married in every 52.5 one death in every 54.5 colored.

The following exhibit will show the number of births, marriages and deaths among the colored population of Rhode Island, in each of the last twenty-two years, from 1861 to 1882 inclusive, and also the aggregates of the same:

## COLORED POPULATION.

1861 97	births	30 marriages 109	deaths.
1862 96	births	23 marriages 90	deaths.
1863 73	births	68 marriages104	deaths.
1864 69	births	35 marriages121	deaths.
1865 87	births	51 marriages	deaths.
1866 124	births	65 marriages 123	deaths.
1867144	births	61 marriages105	deaths.
1868147	births	84 marriages	deaths.
1869136	births	70 marriages133	deaths.
1870	births	70 marriages 128	deaths.
1871146	births	64 marriages	deaths.
1872171	births	76 marriages184	deaths.
1873163	births	69 marriages	deaths.
1874	births	80 marriages	deaths.
1875156	births	76 marriages169	deaths.
1876 170	births	59 marriages156	deaths.
1877168	births	64 marriages160	deaths.
1878172	births	80 marriages	deaths.
1879159	births	61 marriages 168	deaths.
1880 140	births	76 marriages	deaths.
1881192	births	84 marriages	deaths.
1882	births	74 marriages	deaths.
_	_	_	
Total3.117	births 2.	120 marriages	deaths.

During a period of twenty-two years, from 1861 to 1882 inclusive, the whole number of births of colored parentage have exceeded the whole number of deaths of colored persons by 60 only.

It should be observed that the increase of births over deaths has occurred almost wholly since the increased immigration of colored females from the former slave States, since about 1867.

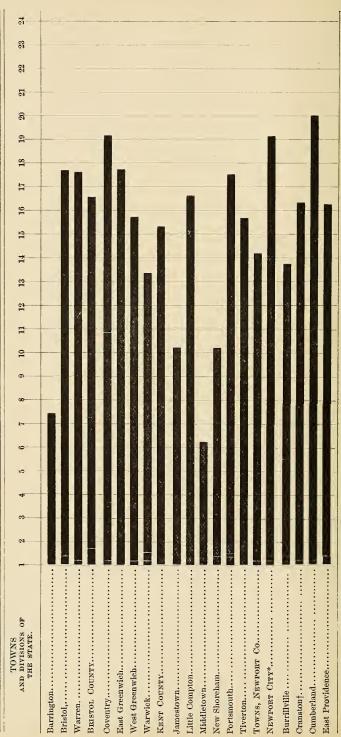
During the five years from 1861 to 1865 inclusive, the deaths of colored persons exceeded the births of colored children, not including still-births, by more than twenty-five per cent.



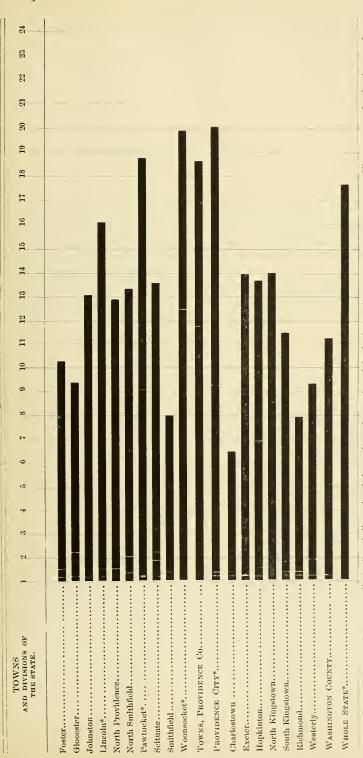


DEATH RATES.

Diagram showing the number of deaths in each 1000 of the population, in each town and each county in the State, during the year 188°, computed by the Census of 1880, except as indicated. See explanation in foot note on next page.



\* See next page. † Excluding State Institutions.



The figures at the top of the perpendicular lines indicate, in whole numbers, the number of deaths during the year in every 1000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington reaches one-half of the space between the perpendicular lines 7 and 8. It shows the death rate of Barrington, in 1882, was about seven and one-half in every 1000 of the population, according to the Census of 1880. \* By estimate of the population June 30th, 1882.



# CAUSES OF DEATH, 1882.

The statistics of the causes of death in Rhode Island, in 1882, may be found in Tables VIII., IX., X. and XII. The whole number of deaths, as previously stated, was 5,074. The number of which the cause of death was reported was 4,803, and the number of which the cause was not stated was 271.

The following Table shows the number of deaths in 1882, in each larger division of the State, and the number and proportion in each division of which the cause was reported unknown:

TABLE L.

1882.	Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State.
Number of deaths	188 5	315 27	119	297 35	1,666 157	2,242 12	247 32	5,074 271
One in	37.6	11.6	37.6	8.5	10.6	187.0	7.7	18.8

The utter needlessness of such a large proportion of deaths returned with the statement "cause of death unknown," has been repeatedly urged and commented upon in previous reports.

In the city of Providence the proportion of deaths, during 1882, of which the cause was not ascertained, was one in every 187. In Providence county towns there was one in every 10.6; in Newport city one in every 8.5; and in Washington county one in every 7.7.

Is it to be believed that so many more persons die in some parts of the State, from really unknown causes, than in the city of Providence?

## TABLE LI.

Showing the proportion of deaths reported, with "cause unknown," in each division of the State, and in the whole State, in each of the last twenty years, from 1863 to 1882 inclusive.

YEARS.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.	Whole State.
1863, One in	16.5	11.2	25.5	6.9	46.7	24.7	14.7
1864, One in	57.0	12.6	11.6	8.5	45.7	47.6	16.1
1865, One in	64.3	27.4	13.4	8.2	55.0	32.9	16.4
1866, One in	163.0	11.4	22.4	9.5	45.0	23.3	17.3
1867, One in		13.6	34.5	7.4	64.0	14.3	14.8
1868, One in	33.2	5.0	20.3	5.2	46.2	10.1	10.1
1869, One in	41.2	5.8	52.8	5.3	83.6	16.1	11.3
1870, One in		19.3	23.6	11.8	90.2	26.9	23.6
1871, One in	151.0	81.2	7.9	8.4	83.6	9.8	13.0
1872, One in	13.3	5.8	10.0	6.8	72.8	9.8	11.3
1873, One in		16.0	25.4	9.8	102.5	27.5	20.3
1874, One in	54.0	15.2	14.0	17.2	73.7	21.2	27.8
1875, One in	55.0	7.4	15.6	13.7	91.2	11.9	20.9
1876, One in	11.5	7.9	18.5	9.9	124.3	22.8	19.3
1877, One in		17.7	9.7	11.9	323.0	16.0	23.2
1878, One in	32.1	7.4	9.0	13.7	124.2	21.7	21.1
1879, One in	16.6	9.2	12.4	9.5	225.1	8.6	17.6
1880, One in	21.9	23.5	13.5	10.5	122.3	17.8	20.7
1881, One in	204.0	13.0	11.2	7,3	143.0	6.5	14.4
1882, One in	87.6	11.6	10.9	10.6	187.0	7.7	18.8

The following summary will show the proportion of all deaths reported with cause unknown, to whole number of deaths, in each of the several divisions, during the last twenty years:

Bristol County	One death, cause unknown, in every 48.6 decedents.
Kent County	One death, cause unknown, in every 16.1 decedents.
Newport County	One death, cause unknown, in every 18.1 decedents.
Providence County Towns	One death, cause unknown, in every 9.2 decedents.
Providence City	.One death, cause unknown, in every 107.4 decedents.
Washington County	One death, cause unknown, in every 18.8 decedents.
Whole State	One death, cause unknown, in every 18.8 decedents.

The proportion of deaths in the whole State, reported with cause unknown during the first half of the above twenty years, that is, from 1863 to 1872 inclusive, was one in every 14.8, or six and seven-tenths in each hundred decedents.

During the second half of that period, that is, from 1873 to 1882 inclusive, the proportion of deaths returned, with statement of cause unknown, was one in every 22.8, or four and four-tenths of each hundred decedents.

#### PRINCIPAL CAUSES OF DEATH.

The following Table gives the number of deaths in Rhode Island, from each of thirteen principal causes, showing the order in regard to number, in each of the last five years; and also the aggregates and proportions of the same causes of death, for thirty years and seven months, from June 1st, 1852, to December 31st, 1882:

TABLE LII.

Showing the order in regard to number and proportion of decedents from thirteen principal causes of death.

Percentage of whole number of deaths, 30 years, 7 mos.	100.00	15.83	6.03	5.34	5.08	4.34	4.15	3.90	3.71	3.48	3.08	*2.91	2.17	1.98
June 1st, 1852, to Dec. 31st, 1882—30 yrs. 7 mos.	Whole Number. 101,230	676 Consumption16,025	Pneumonia and Conges. of Lungs 6,099	Conges. of Lungs. 317 Old Age5,408	Cholera Infantum. 5,143	Scarlatina4,398	Dysentery and Diarrhea4,210	evers, Typhoid, & Heart, Diseases of. 3,947	Fevers, Typhoid,	Apoplexy and Paralysis3,527	Accidents (all kinds)3,018	102 Diphtheria*2,949	Convulsions and Fits2,203	Dysentery and Distribution 98 Croup2,013
1878.	Whole Number4,441	Consumption 676	Diphtheria 435	Pneumonia and Conges. of Lungs. 317	259 Old Age 232 Cholera Infantum.5,143	220 Cholera Infantum 168 Scarlatina4,398	220 Heart, Diseases of. 166	1	Tevers, Typ Cholera Infantum 161 Accidents (all kinds) 122 &c	Cancer (all kinds) 119	Convulsions and Fits112	 :	102 Croup 93	Dysentery and Diarrhea 93
1879.	Whole Number4,472	642 Consumption 637 Consumption	Pneumonia and Conges. of Lungs. 311 Diphtheria	364 Scarlatina 311	273 Diphtheria 259	Apoplexy and Paralysis 220	:	215 Heart, Diseases of., 202	Cholera Infantum 161	Cancer (all kinds) 125	Fevers, Typhoid,	Convulsions, &c 104	125 Accidents 102	Croup 96
1880.	Whole Number5,074 Whole Number5,016 Whole Number4,829 Whole Number4,472 Whole Number4,441 Whole Number101,230		Scarlatina 468	Pneumonia and Conges. of Lungs. 364	247 Old Age 273	poplexy and Paralysis 265 Cholera Infantum. 240 Cholera Infantum. 247 Paralysis	216 Heart, Diseases of 231 Old Age	Apoplexy and Paralysis	evers, Typhoid,	145 Diphtheria	evers, Typhoid,	Apoplexy an Convulsions, &c 133 Convulsions, &c 104 Paralysis.	138 Cancers 125	Dysentery and 119 Diarrhea 98 Croup
1881.	Whole Number5,016	Sonsumption 737 Consumption 706 Consumption	neumonia and Pneumonia and Conges. of Lungs. 327 Scarlatina	Cholera Infantum 325 Heart, Diseases of 264 Conges. of Lungs.	283 Old Age 347	Cholera Infantum 240	Diphtheria 216	229 Brain, Diseases of. 179	Apoplexy 146	166 Cancers 145		132 Accidents 142	110 Scarlatina 138	Dysentery and Diarrhea
1882.	Whole Number5,074	Consumption737	Pneumonia and Conges. of Lungs. 344	Cholera Infantum 325	Old Age 283	Apoplexy and Paralysis 265	Heart, Diseases of 255 Diphtheria	Fevers, Typhoid,	Brain, Diseases of., 173 Apoplexy	Accidents 166	Dysentery and Diarrhea158	Cancers 132	Convulsions 110	Diphtheria 101

Consumption numbered a larger number of victims, during 1882, than in any previous year. Such increase will continue, from year to year, with an occasional possible exception, so long as a considerable annual increase of population continues.

The proportion to whole number of deaths, from stated causes, is slightly larger than that of the previous year, or previous three years. The number is not larger, however, in proportion to the actual population, than during either of the three previous years.

Cholera infantum was more prevalent, in 1882, than during several previous years, and the number of decedents was a large increase over those years.

The columns of Table LII., showing the whole number of deaths from each of the thirteen causes during thirty years of registration, and the proportion of each cause to whole number of deaths, will be of interest to the reader.

The diseases named in Table LII, will have further consideration on subsequent pages.

TABLE LIII

A summary of deaths in Rhode Island in 1882, from twenty leading causes, showing the number, sex, parentage,

localities.
and
ages
season,

Stomach, Diseases of.	43	20	9 34	4 8 8 9 9 9 1 4 10 1 8 9 8
Scarlatina.	45	224	16 29	4 & D D D D D D D D D D D D D D D D D D
Pneumonia and Conges- tion of Lungs.	344	178 166	163 181	88848481 5888458458
Old Age.	283	110	190	8888888 8888888 8888888888888888888888
Liver, Disease of.	89	28 28	36 36	2455440 2889 286
Kidneys, Disease of.	98	50	45	73365555
Нооріпд Соцді.	71	88	33	
Heart, Diseases of.	255	116	162 93	1888 800 100 400 7744 61
Ferers, Typhoid, &c.	688	1111	129	12 10 10 10 10 10 10 10 10 10 10 10 10 10
Dysentery.	89	3 33	37	
Diphtheria.	101	48	55	402000000400000000000000000000000000000
Diarrhæa.	06	40 50	38	88481940 1000 1000 1000 1000
Croup.	111	41	32.	011 111 8 8 8 4 8 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
Consumption.	787	322 415	272 465	644 651 770 770 770 770 770 770 770 770 770 77
Cholera Infantum.	325	173 152	133 192	6.17 1.38 1.38 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50
Сапсет.	132	92	83	000 000 000 000 000 000 000 000 000 00
Bronchitis.	100	39	47	0111111049888111
Brain, Diseases of.	173	84	84	71 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25
Apoplexy and Paralysis.	265	139 126	168	200 200 200 200 200 200 200 200 200 200
Accidents.	166	121 45	64 102	20 20 20 20 20 20 20 20 20 20 20 20 20 2
	Number of decedents from each cause.	x, { Males. Ø { Females.	A \ Foreign.	And January. Rebruary. March. April. May. June. July. September. October. November.

TABLE LIII.—Continued.

A summary of deaths in Rhode Island in 1882 from twenty leading causes, showing the number, sex, parentage,

season, ages and localities.

Stomach, Diseases of.	44 :000005-040	
Scarlatina.	861	16 : 3
Pnenmonia and Conges- tion of Lungs.	17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	10 6 6 17 17 91 31
.9gA bio	103	30 35 14 106 79 13
Liver, Disease of.	8	20 00 00 00 00 00 00 00 00 00 00 00 00 0
Kidneys, Disease of.	8.1 .4 0 0 0 0 E E E E E E E E E E E E E E E	00 12 24 12 15 05
Hooping Congh.	69	26
Heart, Diseases of.	841454888888888888888888888888888888888	8 116 55 143 111
Fevers, Typhoid, &c.	111 822 446 669 669 669 669 669 756 669 669 669	11 3 145 145 6
Dysentery.	: ::::::::::::::::::::::::::::::::::::	1 00 tr 4 00 00
Diphtheria.	100 mm m	
Diarrhœa.	19 : : : : : : : : : : : : : : : : : : :	1 :484
Croup.	66	1 0 1 1 10 cm cm cm
Consumption,	46 20 20 20 20 20 20 20 20 20 20 20 20 20	36 232 232 252 253 253 253 253 253 253 253
Cholera Infantum.	83	20 11 12 130 130 130
Сапсет.		7 4 7 8 8 8 x
Bronchitis.		8817788
Brain, Diseasee of.	883 157 100 100 111 111 114 114	401 00 417 60
Apoplexy and Paralysis.	88. 14. 177. 10. 11. 11. 11. 11. 11. 11. 11. 11. 11	15 11 11 13 65 117 117
Accidents.	98 100 81 100 81 80 100 84 80	01 40 407 777 9
	Cunder 5 years 5 and under 10 10 15 10 30 20 30 30 40 40 50 50 60 60 70 70 80 80 and over Not stated	Rent County Newport County Newport County Providence County Towns. Providence County Towns.  Providence City Washington County

## COMMENTS.

In the following remarks upon several of the principal causes of death in Rhode Island, during the year 1882, an alphabetical order will be followed, as presented in Table LIII.

## DEATHS FROM ACCIDENTS.

The number of deaths from accidental causes of all kinds, reported in Rhode Island in 1882, was 166. This number is 24 more than in 1881, and 29 more than in 1880.

Of these 166 deaths, 17 were from burns and scalds; 40 by drowning; 31 from falls; 6 from poisoning; 16 from railroad accidents; 8 from asphyxia, and 48 from accidents too numerous to specify.

Of the whole number of deaths by accidents, 121 were males, and 45 were females; 64 were of American, and 102 were of foreign parentage.

It will be noticed how much larger the proportion of males is than that of females; that is, 73 per cent. of male decedents, to 27 per cent. of female decedents. Of parentage, 61 per cent. was of foreign, and 39 per cent. of American.

The number of deaths in each division of the year was as follows:

First Quarter34	Third Quarter
Second Quarter42	Fourth Quarter35
Active	
First half	Second half90
Whole Year	166

In regard to periods of life, the decedents from accidental causes were divided as follows: Under 5 years, 26; 5 and under 10, 13; between 10 and 20, 33; between 20 and 40, 38; between 40 and 60, 31; over 60, 28; and 2, age not stated.

In regard to sectional divisions of the State, 5 of the deaths from accidental causes were in Bristol county; 7 in Kent county; 14 in Newport county; 9 in Washington county, and 131 in Providence county. In Providence county, with about 73 per cent of the whole population of the State, there was 80 per cent. of the whole number of deaths from accidents, and in Providence city, with more than 38 per cent. of the population of the State, there was about 33 per cent. of the deaths from the same causes.

The whole number of deaths from accidental causes, in 1882, in proportion to the whole number of deaths from specified causes, in the State, was about three and one-half per cent.

In proportion to population, by the census of 1880, the accidental deaths occurred in the different localities as follows:

Bristol County One in every 2,279 of the population	n.
Kent CountyOne in every 2,941 of the population	n.
Newport County One in every 1,727 of the population	n.
Providence County TownsOne in every 1,722 of the populatio	n.
Providence CityOne in every 1,362 of the populatio	n.
Washington County One in every 2,499 of the populatio	n.
Whole State One in every 1,666 of the populatio	n.

## APOPLEXY AND PARALYSIS.

The number of deaths reported in Rhode Island, in 1882, as having been caused by apoplexy and paralysis, was 265.

This number is 21 more than in the preceding year, and 50 more than in 1880.

The following Table will present some of the natural and local relations of these causes of death, during the last eighteen years:

## TABLE LIV.

Showing the whole number and percentage of the Deaths in the State, from Apoplexy and Paralysis combined; and also the Sex and Parentage of the Decedents from these causes, and the number of the same in each of the Counties, from 1865 to 1882 inclusive.

	aths.		APOPLEXY AND PARALYSIS.										
	Whole Number of Deaths.	Apo- alysis.		SE	X.	PAREN	TAGE.		DIVISIO	ONS OF	THE	STATE.	
YEARS.		Number from Apoplexy and Paralysis.	Per cent.	Males.	Femules.	American.	Foreign.	Bristol County.	Kent County.	Newport	Providence County Towns.	Providence City.	Washington County.
1865	3,405	100	2.93	52	48	81	19	9	8	14	23	38	8
1866	2,970	92	3.09	46	46	80	12	8	5	17	24	29	9
1867	2,889	124	4.29	59	65	101	23	9	9	13	35	49	9
1868	2,912	111	3.81	56	55	86	25	9	6	19	27	46	4
1869	3,382	117	3.46	55	62	92	25	12	13	18	20	48	6
1870	3,238	130	4.32	68	62	105	25	14	10	10	39	52	5
1871	3,344	156	4.66	73	83	113	43	10	17	15	40	61	13
1872	4,247	125	2.97	62	63	96	29	17	9	10	27	52	10
1878	4,403	134	3.04	59	75	109	25	9	8	17	26	57	17
1874	4,229	156	3.69	84	72	120	36	14	10	16	42	59	15
1875	4,817	166	3.61	79	87	133	33	7	13	17	46	75	8
1876	4,116	165	4.01	79	86	130	35	13	11	13	45	68	1
1877	4,450	181	4.07	87	94	123	58	10	10	16	52	74	19
1878	4,441	188	4.23	104	84	145	43	12	16	21	58	66	15
1879	4,472	220	4.92	114	106	146	74	12	9	29	71	89	10
1880	4,829	215	4.67	109	106	157	58	18	13	22	71	78	13
1881	5,016	244	4.86	116	128	170	74	17	15,	25	70	101	16
1882	5,074	265	5,22	139	126	168	97	15	29	24	65	117	15
Total	71,742	2,889	4.01	1,423	1,448	2,155	784	215	211	316	781	1,159	207

It will be perceived that there was a considerable increase in the percentage of deaths from apoplexy and paralysis, in proportion to the whole number of deaths in 1882, as compared with the previous year. This is in accordance with the rule established by more than twenty years of registration, that apoplexy as a cause of death is becoming more common from year to year.

In 1872, the proportion of mortality from the causes above named was less than 3 per cent. Since that time the proportion has gradually increased to 5.22 per. cent. in 1882.

It will be seen, by reference to the columns of parentage, that the increased proportion has been very largely in the class of foreign parentage.

TABLE LV.

Showing the ages of Decedents from Apoplexy and Paralysis, in each of the last seventeen years.

	Periods of Life.									
APOPLEXY AND PARALYSIS.		20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not Stated.	
1865		3	5	6	19	20	28	19		
1866	1	1	7	16	9	24	27	7		
1867	2		6	6	15	38	40	17		
1868	2	3	3	11	16	27	31	16	2	
1869	1	1	5	12	20	28	34	15	1	
1870	4	1	10	9	12	33	41	20		
1871	3	4	7	14	21	46	45	15	1	
1872	1	4	5	17	20	26	41	11		
1873	2	3	4	14	22	35	37	16	1	
1874	1	2	9	9	30	39	40	25	1	
1875	6	2	8	19	23	40	45	22	1	
1876	4	4	4	13	25	43	49	23		
1877	1	2	9	12	24	50	61	22		
1878	4	2	7	14	41	40	53	26	1	
1879	4	6	11	18	27	57	59	38		
1880	1	2	8	18	21	59	70	34	2	
1881	1	7	11	20	36	55	70	42	2	
1882	4	5	14	28	41	57	77	38	1	
	-									
Total	42	52	133	256	422	717	837	406	13	

It has been previously stated that apoplexy, as a cause of death, is almost wholly limited to advanced periods of life. Paralysis, from lesions, or disturbances of function of the nervous system, may occur

in the earlier periods of life, and therefore find a place in the above Table. There are also some physicians who almost invariably certify to a death, primarily from apoplexy, if the death does not occur immediately, as a death caused by paralysis. It may therefore be assumed that a very large percentage of deaths of persons over fifty years of age, reported as caused by paralysis, were in reality caused by apoplexy, the paralysis being the result, and finally the mode of death.

It may be of interest to show the proportion of deaths from apoplexy and paralysis, in 1882, to the population of the different sections of the State in 1880.

## PROPORTION TO POPULATION.

Bristol County	.One in	every	759 persons.
Kent County	.One in	every	710 persons.
Newport County	.One in	every 1,	008 persons.
Providence County Towns	.One in	every 1	,431 persons.
Providence City	One in	every	896 persons.
Washington County	. One in	every 1	,499 persons.
Whole State	.One in	every 1	,045 persons.

## DISEASES OF THE BRAIN.

Under the head of "Diseases of the Brain," in Table LIII., there are included all those diseases returned as "Cerebral Meningitis," "Cerebritis," "Congestion," "Inflammation," and "Diseases of the Brain."

The whole number, 173, is 6 less than in the previous year.

The proportions of deaths from these causes to whole number of deaths from all causes, during each of the last five years, are as follows:

1878.	1879.	1880.	1881.	1882.
3.30 per cent.	3.72 per cent.	3.49 per cent.	3.57 per cent.	3.60 per cent.

Of the 173 decedents, 89 were males, and 84 were females. In regard to parentage, 89 were of American, and 84 of foreign parentage. The deaths in the different seasons of the year were as follows:

36711 3	4 100
First half88	Last half85
_	_
Second Quarter	Fourth Quarter47
First Quarter43	Third Quarter38

The largest number of deaths occurred during the cooler months of the year.

There were 83 decedents, or nearly one-half of the whole number, under five years of age. During the first ten years of life, the decedents numbered 98; in no other ten year period were there more than 17.

#### BRONCHITIS.

The number of decedents, in 1882, whose deaths were reported as having been caused by bronchitis, was 100. This is a considerably larger number than was ever before returned in a single year. The disease has seemed to have largely increased during the last ten or twelve years.

Of the 100 decedents, 39 were males, and 61 were females; or at the rate of 136 females to each 100 males.

In relation to parentage, 47 were of American, and 53 of foreign parentage.

## TABLE LVI.

Showing the whole number of decedents in the State from Bronchitis, with the percentage of whole number of deaths, the sex, parentage, and localities of occurrence, during each of the eighteen years from 1865 to 1882 inclusive.

	aths.	BRONCHITIS.													
	r of De	is.		SEX. PARENT					TAGE.	DIVISIONS OF THE STATE.					
YEARS.	Whole Number of Deaths.	Number of Death from Bronchitis.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.		
1865	3,405	9	.27	4	5	6	3	1		3		5			
1866	2,970	14	.51	3	11	10	4		1	2	7	4			
1867	2,889	19	.71	8	11	10	9	1	2	1	5	10			
1868	2,912	20	.76	9	11	7	13		1	2	5	10	2		
1869	3,382	20	.65	8	12	9	11			1	4	15			
1870	3,238	26	.84	15	11	11	15			1	8	17			
1871	3,344	24	.78	10	14	11	13		1	1	5	17			
1872	4,247	25	.65	10	15	11	14	1	1	1	6	16			
1873	4,403	27	.64	12	15	11	16			1	7	18	1		
1874	4,229	39	.96	22	17	12	27				6	32	1		
1875	4,317	57	1.39	32	25	29	28			1	21	33	2		
1876	4,116	57	1.46	23	34	26	31		2		7	46	2		
1877	4,450	69	1.62	32	37	35	34	1	1	1	22	44			
1878	4,441	80	1.89	30	50	37	43	1	2	6	22	48	1		
1879	4,472	62	1.47	31	31	31	31	1	1	5	21	34			
1880	4,829	91	1.98	49	42	44	47	1	6	6	21	56	1		
1881	5,016	84	1.80	48	36	39	45	1	1	2	25	53	2		
1882	5,074	100	2.08	39	61	47	53	3	2	6	25	60	4		
Total, 18 years	71,742	823	1.14	385	438	386	437	11	21	40	217	518	16		

An inspection of the above Table will show that bronchitis, as a reported cause of death, has gradually increased in its proportion to whole number of deaths from all causes, during the last eighteen years, from about one-quarter of one per cent., in 1865, to more than two per cent., in 1882, or more than eight fold.

It may be said, however, that the real difference is probably not as large, as it may reasonably be assumed that the average physician of

the later years has had increased skill in differential diagnosis, and consequently been able to make a nicer discrimination between acute bronchitis and pneumonia, and that some cases have in the last few years been properly returned as bronchitis, which in former years would have been returned as pneumonia. These diseases are however so nearly related, as to cause and effect, that the distinction is of much less importance than in many others which have several symptoms in common.

In the aggregate of eighteen years, there were 114 female decedents from bronchitis, to every 100 male decedents.

There were also about 114 decedents from bronchitis, of foreign parentage, to every 100 of American parentage.

Bronchitis is, like its congener pneumonia, a disease of the very young, and of those of advanced years.

Of the 100 decedents in 1882, one-half were under five years of age, and of the remaining 50, or the other half, 34 were over sixty years of age.

#### CANCER.

The decedents whose deaths were reported as caused by cancer, used as a generic term, and including various kinds and in all localities, numbered 132.

The percentage of whole number of deaths, in 1882, was 2.75; in 1881 it was 2.90; as against 2.96 in 1879, and 2.72 in 1880.

The varieties of cancer, as reported, may be found in Tables VIII. and IX., on pages 24, 25, 29 and 30. They are classed as follows: Cancer in various localities, or cancer (various), 85; cancer of the breast, 13; of the stomach, 20; of the uterus, 14.

In 1882 the deaths from cancer, in the several seasons of the year, were as follows:

First Quarter	Third Quarter
Second Quarter	Fourth Quarter39
	_
First half	Last half77
XX71-1	100

#### CHILD-BIRTH.

Frequently cases of death are reported as having been caused by child-birth, without stating whether from hemorrhage, convulsions, nervous shock, septicemia, local injury, or what. As child-birth was the primary cause, the immediate cause is perhaps not necessarily

important. Under the head of "Child-birth," therefore, are included puerperal fever, puerperal convulsions, and whatever causes that can only occur as the result of child-birth.

The number reported in 1882 was 50; 19 of which were from the immediate effects of child-birth, without specifying particular cause, 3 from puerperal convulsions, and 28 from puerperal fever.

Of the 19 decedents from the immediate effects of child-birth, 6 were of American, and 13 were of foreign parentage; of the 3 from puerperal convulsions, all were of foreign parentage; of the 28 from puerperal fever, 12 were of American, and 16 of foreign parentage.

Of the whole number, 18 were of American, and 32 of foreign

parentage.

The statistics of child-birth, taking several years together, would seem to show that, with the exception of the months of July and August, all parts of the year are nearly alike as to any influence season may have upon mortality from that cause.

During the year 1882, the deaths occurred as follows:

First Quarter	Second Quarter15
Third Quarter 4	Fourth Quarter13

Of the decedents, 3 were under 20 years of age, 29 between 20 and 30, 17 between 30 and 40, and the remaining one over 40 years of age.

#### CHOLERA INFANTUM.

The number of deaths from cholera infantum, according to the returns for 1882, was 325. This number, with one exception, is larger than in any previous year.

During the years 1878 and 1879, there was a greatly lessened prevalence of cholera infantum in Rhode Island, and a consequently diminished number of deaths from that cause.

But during the last three years it has been acquiring larger importance, in degree of prevalence and as a cause of mortality.

Of the 325 decedents, 173 were males, and 152 were females; or 114 males to every 100 females.

Of parentage, 133 were of American, and 192 of foreign parentage; or 144 of foreign to every 100 of American parentage.

In proportion to the population, by the census of 1880, the deaths occurred in the different divisions of the State as follows:

Bristol County	.One in	every	569 persons.
Kent County	.One in	every	1,871 persons.
Newport County	.One in	every	1,272 persons.
Providence County Towns.	.One in	every	705 persons.
Providence City	.One in	every	806 persons.
Washington County	. One in	every	1,730 persons.
Entire State	One in	every	851 persons.

The following Table shows the whole number of reported deaths from cholera infantum; the sex and parentage of the decedents; and the number in each of the larger divisions of the State, in each of the last eighteen years:

TABLE LVII.

					-						
				CH	OLERA	INF	ANTU.	м.			
	aths.	SI	EX.	PARE	NTAGE.		DIVISI	ONS OF	THE	STATE.	
YEARS.	Number of deaths,	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns,	Providence City.	Washington County.
1865	145	63	82	61	84	17	7	14	48	50	9
1866	110	67	43	50	60	1	7	8	39	47	8
1867	117	64	53	62	55	4	3	7	45	49	9
1868	154	85	69	66	88	13	4	12	44	70	11
1869	151	81	70	79	72	6	15	6	48	65	11
1870	213	106	107	95	118	15	15	13	69	93	8
1871	172	85	87	82	90	14	12	12	59	62	13
1872	391	195	196	167	224	16	16	21	157	151	30
1873	285	148	137	165	120	17	14	16	120	99	19
1874	265	140	125	115	150	4	12	5	84	134	26
1875	318	156	162	155	163	20	16	20	108	136	18
1876	250	131	119	105	145	5	12	29	68	124	12
1877	259	139	120	96	163	12	13	9	96	122	7
1878	168	96	72	73	95	7	14	7	64	71	5
1879	161	88	73	71	90	8	16	21	51	59	6
1880	247	123	124	109	138	13	11	10	93	100	20
1881	240	130	110	102	138	10	22	14	75	102	17
1882	325	173	152	133	192	20	11	19	132	130	13
Total, 18 years	3,971	2,070	1,901	1,786	2,185	202	220	243	1,400	1,664	242

There have been 3,971 decedents from cholera infantum, in Rhode Island, during the last eighteen years, or a yearly average of 220.

Of these there were 105 male decedents to every 100 female decedents; and 122 decedents of foreign parentage to every 100 of American parentage.

#### CONSUMPTION.

The decedents from consumption, in Rhode Island, in 1882, numbered 737. This number is 31 larger than in 1881, and 95 larger than in 1880.

Sex.—Of these 737 decedents, 322 were males, and 415 were females; or 129 female decedents to every 100 male decedents; or 43.68 males and 56.32 females in every 100 decedents from consumption.

The proportion is about the average of previous years.

Parentage.—The parentage was as follows: American, 272; foreign, 465; or 170 of foreign parentage to every 100 of American; or 63.09 of foreign and 36.91 of American parentage in every 100 decedents.

The disproportion of decedents by parentage, in 1882, is greater than in any previous year.

During the ten years from 1872 to 1881, inclusive, the whole number of deaths from consumption, as reported, was 6,333. Of this number 2,963 were of American, and 3,370 were of foreign parentage.

The proportions were, therefore, as follows: 113.7 of foreign parentage to every 100 of American; or 46.8 of American parentage, and 53.2 of foreign in every 100 decedents.

During the five years from 1877 to 1881, inclusive, the whole number of deaths from consumption was 3,322. Of that number 1,434 were of American, and 1,888 were of foreign parentage.

There were, therefore, 132 decedents of foreign parentage to every 100 of American; or 43.2 American, and 56.8 foreign in every 100 decedents.

Notwithstanding the increase of population of American parentage, the number of deaths from consumption in that class, from year to year, has not only not increased, but has steadily diminished.

The following summary will show the number of decedents from consumption, in each class of parentage, in each of the last eight years, that is, from 1875 to 1882 inclusive:

Years.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.
American Par	313	316	296	296	278	287	. 277	272
Foreign Par	.337		365	380	359	.355	429	465

It will be seen not only that the decedents from consumption, of American parentage, have *diminished* from 313 in 1875 to 272 in 1882 (about 13 per cent.), but that the decedents of foreign parentage have *increased* from 337 in 1875 to 465 in 1882 (about 38 per cent.).

Season.—The largest number of deaths from consumption, in any month during 1882, was 76, in August. The same month had the largest number of decedents from same cause in 1881, and not unfrequently in previous years, although not the rule. The quarter in which occurred the largest mortality from consumption, in 1882, was the second.

The following summary will show the number of decedents in each quarterly period:

First Quarter	Third Quarter
Second Quarter	Fourth Quarter
First half	Last half
Total	737

Ages.—While no age or period of life is exempt from the ravages of consumption, the largest mortality occurs, in every year, in the middle periods. A reference to Table LIII. will show that in 1882, of the deaths from consumption, 265, or about 36 per cent. of the whole number, occurred between the ages of 20 and 30 years, and of the remaining 472, or 64 per cent., 148, or more than 20 per cent. of the whole number, occurred in persons between 30 and 40 years of age. It will be seen that about 56 per cent., or more than one-half of the mortality from consumption, was confined to the 20 years of life between the ages of 20 and 40.

In order to show more concisely the relation of age to mortality, from consumption, the following synopsis is presented:

Age.	No. of Deaths.
Under 10 years of age	30
Between 10 and 20 years	77
Between 20 and 30 years	
Between 30 and 40 years	
Between 40 and 50 years	87
Between 50 and 70 years	97
Over 70 years	30
Not stated	
Total	787

Taking one year with another, the distribution of mortality from consumption, in the different sections of the State, is quite unequal in the percentage to the whole number of deaths in each section.

The following Table shows the total deaths from all reported known causes, with the number and percentage of deaths from consumption, in each of the larger divisions of the State, and in the whole State, in each of the last seventeen years, and in the aggregate for a period of twenty years, from 1860 to 1879 inclusive:

Table LVIII.—Consumption.—Locality, Number and Percentage.

COUNTIES.	1866.		1867. 1868. 1869. 1870. 1871. 1872. 1873. 1874. 1875. 1876. 1877. 1878. 1879. 1880. 1881. 1882	1869.	1870.	871.	873.	1873.	1874. 1	875. 1	876. 1	877. 1	878	879.	1880.	1881.		Total 20 years. 1860-1879.
BRISTOL COUNTY.							<u> </u>											
Total Deaths, stated causes	162	144	129	165	146	150	184	173	159	162	148	201	187	141	300	303	183	3,144
Consumption	31	18	31	98	98	16	e5 65	16	18	31	19	28	65	16	19	25	98	423
Percentage	19.13	12.50	13.50 16.28 15.76 17.81 10.67 12.50	15.76	17.81	0.67	2.50	9.24	9.24 11.32 12.97 12.83 13.43 12	2.97	2.83	3.431	2 30 1	30 11.35	9.09	9.09 12.31 19.	19.67	13,45
KENT COUNTY.																-		
Total Deaths, stated causes	198	214	168	265	238	281	248	241	252	363	60%	251	240	277	393	313	388	4,761
Consumption	41	56	388	20	46	63	63	43	33	43	258	43	41	88	45	36	51	870
Percentage	20.70	26.17	20.70 26.17 22.62 18,	18,86 19.	19.33	2.42	3.30	33  22.42  13.30  17.43  12.69  16.35  13.39  16.73  16.47  13.72  15.35  11.20  17.71  12.71  12.11	2.691	6.35	3.39 1	6.73	6.47	3.72	5.35	11.20	17.71	18.28
NEWPORT COUNTY.																		
Total Deaths, stated causes	342	303	580	259	371	214	362	366	221	277	088	243	265	330	334	346	378	6,017
Consumption	52	47	43	40	200	55	66	44	98	41	45	65	25	45	34	51	46	857
Percentage	15.18	15.56	$15.18 \ 15.56 \ 14.88 \ 15.44 \ 13.66 \ 10.75 \ 11.06 \ 12.02 \ 11.77 \ 14.80 \ 16.07 \ 13.58 \ 11.69 \ 13.64 \ 10.49 \ 14.74 \ 12.17 \ 12.17 \ 14.80 \ 16.07 \ 13.58 \ 11.69 \ 13.64 \ 10.49 \ 14.74 \ 12.17 \ 12.1$	15.44	13.66	0.75	1.06	13.03	1.77	4.80	$ 6.07 _{1}$	3.58	1.69	3.641	0.49	4.74	13.17	14.24
PROVIDENCE CO. TOWNS.														<u>·</u>				
Total Deaths, stated causes	883	206	2779	913	964	989	,331	$989  \overline{1,331}  \overline{1,389}  \overline{1,217}  \overline{1,230}  \overline{1,110}  \overline{1,308}  \overline{1,233}  \overline{1,437}  \overline{1,451}  \overline{1,509}$	,217/1	,230 1	,110	,391	,308	,233	,437	,451	1,509	20,385
Consumption	171	210	158	180	172	195	221	197	139	201	311	888	655	197	189	088	5994	3,661
Percentage	19.36	23.28	80.29	19.74	7.8411	9.72	6.73	4.1811	1.42 1	6,3411	9.01	5.96 1	7.51 1	5.98	5.351	5.161	4.83	17.95

TABLE LVIII.—CONSUMPTION.—Locality, Number and Percentage.—Continued.

1866. 1867. 1868. 1869. 1870. 1872. 1873. 1874. 1875. 1876. 1877. 1878. 1879. 1880. 1882. Total20 years.	28,194	4,649	16.49		4,513	861	19.08		67,214	11,331	16.84
1882.	945 1,086 1,240 1,249 1,239 1,581 1,725 1,965 1,894 1,850 1,939 1,978 2,017 2,063 2,130 2,230	351	15.73		215	39	13,49		4,803	737	15.33
1881.	2,130	344	16.15		226	30	13.27		4,669	200	15.12
1880.	2,063	322	15.60		270	60	12.23		4,596	642	14.02
1879.	2,017	203	14.53		320	48	21.83		4,218	637	15.10
1878.	1,973	305	15.46		249	47	18.88		4,231	929	15.98
1877.	1,932	294	15.22		240	43	17.91		4,258	661	15.52
1876.	1,850	284	15.35	,	908	89	32.33		3,903	655	16.78
1875.	1,894	202	15.68		284	47	16.55		4,110	650	15.79
1874.	1,965	270	13.74		263	44	16.73		4,077	529	12.96
873. 1	1,725	230	. 53		202	51	17.47		1,186	580	13.86
872. 1	,581	242	5.31		265	49	8,49		3,871	597	15.41
871. 1	,239	195	5.74		222	.35	5.76		3,095	527	7.03
870. 1	,249	238	9.06		233	56	4.04		,101	475	8.52
869. 1	,940 1	310	6.95 1		241	43	7.84 2		8580,	549	7.81
868. 1	,086	214	9.71		173	တ္	1.96 1		,624 [	513	9.51
867. 1	945 1	189	0.00		187	33	0.86		,694 2	559	0.74
366. 1	.013	000	0.74 2		201	85	3.93 2		799 3	523	8.68 2
COUNTIES.	PROVIDENCE CITY. Total Deaths, stated causes 1,013	Consumption	$Percentage. \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Washington County.	Total Deaths, stated causes	Consumption	Percentage	Whole State.	Total Deaths, stated causes [2,799 [3,694 [2,624 [3,082 [3,101 [3,095 [3,871 [4,186 [4,077 [4,110 [3,903 [4,258 [4,231 [4,218 [4,596 [4,669 [4,803 [4,8	Consumption	Percentage

To a person interested in the statistics of consumption, the above Table will furnish material for a considerable amount of study.

The varying proportions of death by consumption to whole number of deaths from stated causes, in the different divisions of the State, from year to year and during the same year, and in the same division during different years, are clearly presented.

It will be seen that, in Bristol county, the proportion (19.7 per cent.) was larger in 1882 than in any previous year shown in the Table, and probably larger than ever previously recorded. The number is nearly 50 per cent. larger than in any single year since 1866, and more than double the average of the two years 1879 and 1880. It is doubtless a temporary occurrence.

In Kent county the proportion (17.7 per cent.) is larger than in any one of the previous ten years, but smaller than the average of a period of twenty years. Kent county has usually shown a large percentage of deaths by consumption.

Newport county, entire, shows a lessened proportion of decedents from consumption (12.2 per cent.), as compared with the previous year, and also as compared with the average of a twenty year period.

In Providence county towns the proportion (14.8 per cent.) is less than in several previous years, and also less by 3 per cent. than the average of twenty-three years.

Providence city shows a proportion of 15.7 per cent. of decedents from consumption to whole number of decedents from known causes. This proportion is less than that of 1881, and also less than the average of twenty-three years.

Washington county has usually had a large proportion of decedents from consumption, compared with the number from other given causes of death. The proportion of 1882 (13.5 per cent.) is, however, 5.5 per cent. less than the average of a period of twenty years. In proportion to population, the decedents from consumption in Washington county are less, with the exception of Newport county, than in any other division of the State.

In the whole State the proportion of 1882 (15.3 per cent.) is about one and five-tenths per cent. less than the average of twenty-three years.

### CONSUMPTION. PROPORTION OF DEATHS TO POPULATION.

It will be understood that the statistics given in Table LVIII. show the *proportion* of decedents from *consumption* to the whole number of decedents from *all other specified causes*.

In regard to the proportion of decedents from consumption, in the several divisions of the State, to the whole number of individuals in

those several and separate divisions, from year to year, it may be said that the varying rate of increase of population in the different divisions makes an *accurate comparison* of the death rates, from any cause or all causes, to the population in each of the several divisions impossible, if based on a census taken several years previous.

A close approximation to accuracy may, however, be obtained, by taking periods of five years and comparing the number of decedents during those periods with the population at the commencement of each of the periods.

In the Twenty-Ninth Registration Report the proportion of deaths from consumption to population was treated at considerable length. From that Report the following exhibit of three periods of five years each, and one of three years, is taken:

## Decedents from Consumption—

5 years,	5 years,	5 years,	3 years,
1865-1869.	1870-1874.	1875–1879.	1879-1881.
Of population	Of population	Of population	Of population
one in every	one in every	one in every	one in every
368	471		569
340	432	535	514
440	626	576	562
ns370	434	397	460
247	282	342	328
461		394	608
344	386	396	
	1865–1869.  Of population one in every	1865–1869. 1870–1874.  Of population Of population one in every one in every	1865–1869.       1870–1874.       1875–1879.         Of population       Of population       Of population

During the year 1882, computing the proportions on the basis of the census of 1880, the results of which it will be understood are somewhat larger than the actual population during the year would warrant, the proportions are found as follows:

### 1882.

Bristol County,	.One death from consumption in every 316 persons.
Kent County	.One death from consumption in every 404 persons.
Newport County	.One death from consumption in every 526 persons.
Providence County Towns	.One death from consumption in every 415 persons.
Providence City	. One death from consumption in every 299 persons.
Washington County	. One death from consumption in every 775 persons.
State	.One death from consumption in every 375 persons.

As before remarked, the above proportions are larger than the real proportions, because of the increase of population since 1880.

The real proportions in Providence county were probably about as follows:

Providence County Towns....... One decedent from consumption in every 438 persons.

Providence City...... One decedent from consumption in every 320 persons.

### CONSUMPTION. PROPORTION TO POPULATION BY PARENTAGE,

It has been previously shown that, during the last eight years, the decedents in Rhode Island from consumption, of American parentage, have diminished about 13 per cent., and that, during the same period, the decedents from the same cause, of foreign parentage, have increased about 38 per cent. These proportions have relation to absolute numbers only.

The proportions to population may be given as follows:

## Decedents

		from consumption	Of population	
	Population, 1880.	in 1882.	one in every	In every 1,000
American parentage.	139,117	272	511	1.90
Foreign parentage	137,414		295	

In every 10,000 of the population of American parentage there were 19 decedents from consumption, in 1882, and in every 10,000 of foreign parentage there were 33.8 decedents from consumption, in the same year.

The following exhibit, taken from the Report for 1881, will show the proportions of decedents from consumption, in each of the two classes of parentage, and in both combined, in several periods, from 1865 to 1881 inclusive:

	5 years,	5 years,	5 years,	2 years,
	1865-1869.	1870-1874.	1875-1879.	1880-1881.
	NUM	BER OF DEATHS	FROM CONSUMP	TION
Of popul.tion.	in each 10,000.	in each 10,000.	in each 10,000.	in each 10,000.
Of American Parentage.	26.8	24.2	22.3	20.2
Of Foreign Parentage	33.0	28.1	26.0	28.5
Total Population	29.1	26.0	25,2	23.9

#### CROUP.

The number of decedents from croup in Rhode Island, in 1882, was 77. The number in 1881 was 101, showing a decrease of 24. The number in 1881 was unusually large.

Sex.—Of the 77 decedents from croup, in 1882, there were 41 males and 36 females, a proportion of 114 males to each 100 females.

Parentage.—There were 32 decedents of American parentage, and 45 of foreign parentage. The proportions were in the ratio of 140 of foreign to each 100 of American parentage.

Age.—There were 14 of the decedents under one year of age, 19 of one year and under two, 33 of two years and under five, and 11 between five and ten.

Of the 77 deaths from croup, 65 occurred in Providence county.

#### DITHTHERIA.

The decedents from diphtheria, during 1882, numbered 101; less than one-half the number in 1881, and largely less than during any previous year since 1875. A reference to Table LIX will show a remarkable increase during the years 1877 and 1878.

It is one of the fluctuating diseases, depending on the degree of mortality, upon the extent and virulence of occurrence in epidemic form.

Sex.—Of the 101 decedents from diphtheria, 48 were males, and 53 were females. It has been the rule that a larger number of decedents from diphtheria has been of the female sex, and a rule also that the decedents from croup have been more largely of the male sex.

Parentage.—Comprising the decedents from diphtheria, 55 were of American parentage, and 46 of foreign parentage, a proportion in the ratio of 120 of American to each 100 of foreign parentage.

The larger proportion of decedents of American parentage is also the rule of previous years.

Among the decedents were 4 persons of adult age.

#### CROUP AND DIPHTHERIA.

There are several pathological conditions which appertain to croup and diphtheria in common. Comparisons have therefore been made of the various relations of these diseases, in previous reports, and are continued in this by the following Table, which exhibits the number of deaths and the sex of the decedents in Rhode Island, from croup and from diphtheria, in each of the seven years from 1858 to 1864 inclusive, and also the number, the sex and the parentage of the decedents from croup and from diphtheria, in each of the last eighteen years, from 1865 to 1882 inclusive:

TABLE LIX.

		С	ROUP	•			DIPI	HTHE	RIA.	
VDADG	Deaths.	SE	x.	PAREN	TAGE.	eaths.	SE:	х.	PAREN	TAGE.
YEARS.	Number of D	Males.	Females.	American.	Foreign.	Number of Deaths.	Males.	Females.	American.	Foreign.
1858	69	35	34			6	1	5		
1859	58	37	21			20	10	10		
1860	57	27	30			67	24	43		
1861	58	32	26			140	66	74		
1862	73	34	39			81	31	50		
1863	97	51	46			155	73	82		
1864	105	48	57			160	67	93		
1865	94	44	50	32	62	82	41	41	62	[20
1866	53	26	27	22	31	64	26	38	36	28
1867	50	25	25	21	29	31	14	17	19	12
1868	30	13	17	14	16	20	8	12	11	9
1869	41	19	22	14	27	33	18	15	19	14
1870	53	29	24	25	28	33	17	16	18	15
1871	72	39	33	31	41	57	23	34	29	28
1872	66	37	29	17	49	48	24	24	35	13
1878	68	30	384	35	33	45	24	21	35	10
1874	65	39	26	38	27	59	30	29	37	22
1875	96	53	43	43	53	33	17	16	18	15
1876	102	50	52	42	60	159	77	82	69	90
1877	95	48	47	34	61	492	239	253	233	259
1878	93	45	48	43	50	435	224	211	201	234
1879	96	58	38	40	56	259	121	138	143	116
1880	66	32	34	27	39	152	73	79	75	77
1881	101	45	56	38	63	216	106	110	118	98
1882	77	41	36	32	45	101	48	53	55	46
Total, 25 years	1,835	937	898	548	770	2,948	1,402	1,546	1,213	1,106

It will be noticed that the parentage of the decedents from croup and diphtheria is not given in the above Table, during the first seven years. This is owing to the omission of reporting the parentage of the decedents previous to the year 1865. During the twenty-five years, the whole number of deaths from croup was 1,835, and the number from diphtheria was 2,948.

For every 100 deaths from croup there were 160 deaths from diphtheria.

#### CROUP. SEX AND PARENTAGE.

The proportions of the sexes of the decedents from croup, in the aggregate of twenty-five years, were as follows: To every 100 female decedents there were 104.3 male decedents; or 51.1 males and 48.9 females in every 100 decedents.

During the eighteen years from 1865 to 1882, inclusive, the decedents from croup of American parentage numbered 548, and of foreign parentage 770. To every 100 decedents of American parentage there were 140.5 of foreign parentage; or 40.9 of American and 59.1 foreign in every 100 decedents.

#### DIPHTHERIA, SEX AND PARENTAGE.

Of the 2,948 decedents from diphtheria in the aggregate of twenty-five years, there were 1,402 males and 1,546 females; a proportion of 110.3 females to every 100 males; or 52.4 females and 47.6 males in every 100 decedents.

Of the parentage of the decedents from diphtheria, during the last eighteen years, 1,213 were of American, and 1,106 of foreign parentage. There were 109.7 of American to every 100 of foreign; or 52.3 of American and 47.7 of foreign parentage in every 100 decedents.

#### SEASON AND MORTALITY.

The influence of season in regard to mortality from croup and diphtheria, may be seen in the following Table, where these diseases may also be compared with scarlatina, to which they bear resemblance in some respects. The Table will give the whole number of deaths in each month during the periods named, and the average monthly and quarterly percentages of deaths, from each disease:

TABLE LX.

MONTHS.		OUP. -1882.	DIPHT1 1858-	HERIA. 1882.	SCARLATINA. 1853–1882.		
MONTHS.	Number of Deaths.	Per cent.	Number of Deaths.	Per cent.	Number of Deaths.	Per cent.	
January	266	12.86	284	9.34	595	12.21	
February	231	10.74	208	6.84	547	11.22	
March	185	8.60	225	7.40	489	10.03	
First Quarter	682	31.70	717	23.58	1,631	33.46	
April	154	7.16	185	6.08	408	8.37	
May	102	4.74	189	6.21	453	9.29	
June	100	4.70	184	6.06	393	8.06	
Second Quarter	356	16.60	558	18.35	1,254	25.72	
July	68	3.14	160	5.01	289	5.93	
August	55	2.56	188	5.90	233	4.78	
September	142	6.60	281	9.13	223	4,57	
Third Quarter	265	12.30	629	20.04	745	15.28	
October	227	10.55	392	12.56	303	6.21	
November	313	14.55	394	12.96	403	8.33	
December	308	14.30	350	12.51	536	11.00	
Fourth Quarter	848	39.40	1,136	38.03	1,242	25.54	
Totals	2,151	100.00	3,040	100.00	4,872	100.00	

The above Table presents the results of the registration of mortality from croup and from scarlatina, in relation to seasons, for a period of thirty years, and from diphtheria for a period of twenty-five years. It will be admitted that it affords very reliable data for conclusions, not only in regard to the influence of season upon the mortality from those diseases, but also, by analogy, in regard to the influence of season in the furnishing of the conditions most promotive of the largest prevalence of those diseases.

The results of registration show that each of them prevails most largely during the coldest months of the year, and least during the warmest months.

The minimum mortality from croup is reached in August; the maximum during the month of November.

The minimum mortality from diphtheria occurs in July, and the maximum in November.

The minimum mortality from scarlatina is reached in the month of September, although nearly as small in August, and the maximum in January.

It seems anomalous that diphtheria and scarlatina, which occupy the most prominent positions in the list of so-called filth diseases, should prevail most largely in the seasons when the decomposition of out-door filth is arrested and held by frost.

#### DIARRHŒA AND DYSENTERY.

The number of decedents whose deaths were reported as having been caused by diarrhea and dysentery, in Rhode Island, in 1882, was 158. With the acute cases of these diseases there were also several of each reported as of the chronic form.

Sex.—Of the 158 decedents from diarrhæa and dysentery there were 75 males and 83 females, a proportion of about 111 females to every 100 males.

Parentage.—There were, of the 158 decedents, 69 of American parentage and 89 of foreign parentage; or 129 of foreign parentage to every 100 of American.

Age.—There were 94 decedents under 5 years of age, and 4 only between 5 years and 20 years of age. The remainder of the 158 were distributed quite evenly through the remaining periods of life.

## FEVERS. TYPHOID, &C.

There were 229 decedents reported in Rhode Island, in 1882, whose deaths were returned as having been caused by some form of "Fever," not including puerperal. The number is larger by 86 than that of the previous year, and the largest during the whole period of registration in the State, with the exception of 1865, during which year the dededents from fever were of exactly the same number as in 1882.

There are included under the above title the following as reported fevers: bilious, 1; malarial, 8; typhoid, 213; fever, 7.

The following Table exhibits, for each of the last eighteen years, the whole number of deaths in the State; the number and the percentage, and the sex and parentage of the decedents from fevers, and the number in each division of the State:

TABLE LXI.

	uths.					TYI	PHOID	FEVE	ER.				
	r of De			SE	x.	PARES	NTAGE.		DIVISI	ONS OI	THE	STATE.	
YEARS.	Whole Number of Deaths.	Typhoid Fever.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865	3,405	229	6.4	114	115	149	80	8	17	22	82	79	21
1866	2,970	150	5.0	73	77	82	68	7	5	32	54	45	7
1867	2,889	119	4.1	60	59	84	35	9	10	17	. 47	31	5
1868	2,912	84	2.9	45	39	57	27	4	5	7	30	23	15
1869	3,382	101	3.0	53	48	79	22	7	7	1	37	33	16
1870	3,238	153	4.7	66	87	80	73	- 5	11	14	57	49	17
1871	3,344	125	3.7	60	65	69	56	2	8	10	41	51	13
1872	4,247	179	4.2	87	92	91	88	4	12	6	75	65	17
1873	4,403	172	3.9	73	99	113	59	4	9	9	61	56	33
1874	4,229	117	2.8	57	60	56	61	1	10	3	37	58	8
1875	4,317	147	3.4	73	74	90	57	1	4	6	49	69	18
1876	4,116	126	3.0	65	61	71	55	5	9	13	44	33	22
1877	4,450	134	3.0	63	71	65	69	8	10	8	52	44	12
1878	4,441	150	3.4	68	82	77	73	13	15	7	62	58	14
1879	4,472	114	2.7	47	67	63	51	4	13	6	44	40	7
1880	4,829	158	3.4	74	84	94	64	8	12	5	66	52	15
1881	5,016	143	2.8	74	69	74	69	4	13	14	58	41	13
1882	5,074	229	4.7	111	118	100	129	6	11	5	56	145	6
Total, 18 years	71,734	2,630	*3.7	1,263	1,367	1,494	1,136	100	181	185	952	972	259

The percentage of deaths from fever, in 1882, in proportion to total mortality, was larger than in any year since 1865.

Sex.—Of the 229 decedents, 111 were males and 118 were females; or a proportion of 106.3 females to every 100 males.

During the period of eighteen years, 1865 to 1882 inclusive, the proportions of the sexes of the decedents from "Fever," in Rhode Island, were 108.2 females to every 100 males, or about 52 females and 48 males in every 100 decedents.

Parentage.—There were 100 decedents from fever, of American parentage, in 1882, and 139 of foreign parentage, a proportion of 56 of foreign and 44 of American in every 100 decedents.

<sup>\*</sup> Percentage of total mortality.

The proportions are not in accordance with the aggregates of the whole period of eighteen years, which are 132 of American parentage to every 100 of foreign.

But a very considerable change has occurred during the last nine years, in regard to the parentage of decedents from "Fevers."

During the first half of the period of eighteen years, the average proportions were 158 of American parentage to every 100 of foreign; and during the last half of the eighteen year period the average proportions have only been 110 of American parentage to every 100 of foreign.

The following Table shows the number of decedents from fevers, in each division of ages, in each of the last eighteen years, in the State of Rhode Island:

TABLE LXII.

TYPHOID FEVER.				PE	RIOD	s or	LIF	E.			
YEARS.	Under 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	35	18	46	54	30	14	18	7	5	2	
1866	23	10	21	26	21	16	9	14	10		
1867	17	6	23	33	12	11	8	4	2	2	1
1868	10	7	10	21	8	8	10	4	5		
1869	10	8	14	28	9	7	9	8	6	2	
1870	15	13	28	39	16	20	7	7	6	1	
1871	13	10	20	28	18	16	9	4	5	2	
1872	17	18	34	54	20	9	12	11	3	1	
1873	27	12	34	31	25	13	13	7	8	2	
1874	10	14	26	32	9	5	10	3	6	2	٠
1875	23	14	19	43	18	10	10	6	4		
1876	21	10	15	24	14	9	6	16	6	3	2
1877	22	13	13	36	20	8	5	7	2	2	1
1878	17	16	27	47	13	11	12	2	3	2	
1879	19	7	14	26	15	6	3	12	8	3	1
1880	25	12	24	43	23	12	10	5	3		1
1881	25	9	19	27	14	11	9	12	11	4	ļ 
1882	24	22	44	69	27	14	9	10	9	1	
Totals	353	219	431	671	312	200	169	139	102	29	6

Of the 2,630 decedents from "Fever," 1,003 were under 20 years of age, and 983 were between 20 and 40 years of age.

It will be seen, therefore, that 38 per cent. of the whole number of decedents was of persons under 20 years of age, and 37 per cent. of persons between 20 and 40 years of age.

Typhoid fever, as a cause of death, had gradually decreased in importance, since 1865, until, during the year 1882, it attained a larger prevalence and large fatality, which was however mostly confined to that section of the State comprising Providence city and adjoining towns. And this fact is significant in relation to the mooted question of the antagonism between the existence of malarial and typhoid fever. It is known that malarial diseases prevailed to a larger extent in Providence city, during the summer and fall of 1882, than in any previous year; that is, a larger prevalence throughout the city limits, with the exception of a part of ward nine. The same conditions existed in the adjoining towns. The largely increased prevalence, therefore, of typhoid fever in those localities, simultaneously with the increased prevalence of malaria, would not seem corroborative of the theory, or conjecture, that the existence of malaria was preventive of the occurrence of typhoid fever, or that they were substitutive the one for the other. The question of mutual convertibility subsequent to prodromic and pathognomonic symptoms of either, is hardly tenable. Malarial diseases, however, frequently take on typhoid characteristics, and genuine typhoid fevers are frequently modified by malarial influence.

#### DISEASES OF THE HEART.

The number of decedents from diseases of the heart, as reported in 1882, was 255. The number is nine less than that of 1881.

Sex.—There were 116 male decedents, and 139 female decedents; a proportion of 120 females to every 100 males. This is contrary to the rule of eighteen years.

Parentage.—Of the 255 decedents from diseases of the heart, in 1882, there were 162 of American parentage, and 93 of foreign, a proportion of 174 of American parentage to every 100 of foreign. This is in accordance with the invariable rule of the whole period of registration.

Season.—The influence of season was not very marked, in regard to mortality from diseases of the heart, in 1882. This may also be observed of previous years, the third quarter showing a slightly smaller number than any other quarterly period.

The following Table exhibits, for each of the last eighteen years, 1865 to 1882 inclusive, the whole number of deaths in the state; the number and percentage, and the sex and parentage of the decedents from diseases of the heart, and the number of the same in each division of the State:

TABLE LXIII.

	aths.				DI	SEASE	s of	THE I	HEAR'	т.			
	r of De	Heart.		SE	x.	PARE	TAGE.		DIVISIO	ons of	THE S	STATE.	
YEARS.	Whole Number of Deaths.	Diseases of the Heart.	Per cent.	Males.	Females.	American,	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865	3,405	98	2.88	51	47	65	33	6	5	8	27	47	5
1866	2,970	115	3.87	58	57	90	25	7	8	10	41	40	9
1867	2,889	114	3.94	67	47	81	33	4	9	7	37	49	8
1868	2,912	116	3.96	58	58	79	37	5	8	12	35	52	4
1869	3,382	128	3.78	75	53	79	49	2	13	11	36	62	4
1870	3,238	117	3.61	77	40	77	40	4	10	8	35	59	1
1871	3,344	144	4.30	78	66	91	53	4	7	8	42	77	6
1872	4,247	189	4.45	104	85	119	70	5	9	10	59	93	13
1873	4,403	189	4.29	83	106	122	67	4	11	14	48	101	11
1874	4,229	214	5.06	109	105	150	64	6	6	28	50	106	18
1875	4,317	186	4.31	84	102	113	73	2	13	22	49	88	12
1876	4,116	166	4.03	81	80	109	57	9	11	10	38	86	12
1877	4,450	182	4.09	94	88	110	72	3	7	9	57	93	13
1878	4,441	166	3.73	88	78	109	57	5	11	15	38	83	14
1879	4,472	202	4.78	114	88	127	75	8	20	16	38	111	9
1880	4,829	231	5.03	125	106	146	85	9	21	29	59	104	9
1881	5,016	264	5.65	131	133	154	110	9	21	24	73	121	16
1882	5,074	255	5.31	116	139	162	93	8	16	23	55	142	11
Totals, 18 years	71,734	3,076	*4.28	1,598	1,478	1,983	1,093	100	206	254	817	1,514	175

Sex.—Of the 3,076 persons deceased from diseases of the heart, in the last eighteen years, 1,598 were males, and 1,478 were females; or 108.1 males to each 100 females.

Parentage.—The proportions in relation to parentage of the decedents from diseases of the heart, during the eighteen years, are quite remarkable.

<sup>\*</sup> Percentage of total mortality.

Of the 3,076 decedents, during that period, 1,983 were of American parentage, and 1,093 of foreign.

The proportions would therefore stand as follows:

To every 100 of foreign parentage there were about 181 of American; or 64.3 American, and 35.7 of foreign parentage in each 100 deaths.

The following Table shows the number of decedents from diseases of the heart, in each divisional period of life, in each of the last eighteen years:

TABLE LXIV.

									1
YEARS.	Under 20.	30 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not Stated.
1865	14	4	6	7	22	17	19	9	
1866	18	8	14	17	10	23	21	4	
1867	11	11	10	13	22	16	27	4	
1868	15	5	13	11	14	28	25	5	
1869	21	4	14	18	20	22	21	7	1
1870	19	6	11	13	20	21	23	3	1
1871	9	12	10	19	23	36	28	6	1
1872	27	12	22	19	31	36	29	13	
1873	19	11	28	18	25	35	42	9	2
1874	20	16	26	21	27	50	40	12	2
1875	14	. 16	25	20	32	29	41	9	
1876	14	10	15	19	20	38	39	10	1
1877	15	11	20	18	27	45	33	13	
1878	16	8	18	16	26	36	35	11	
1879	19	9	13	25	33	51	36	16	
1880	15	10	18	23	38	49	49	28	1
1881	32	13	26	33	37	49	53	21	
1882	22	17	24	25	36	51	61	17	2
Total	320	183	313	335	463	632	622	197	11

The results of eighteen years of registration, with record of ages of decedents from diseases of the heart, show in periods of twenty years of life, the following percentages:

Under 20 years of age	. 10.4 per cent.
Between 20 and 40	. 16.1 per cent.
Between 40 and 60	. 26.1 per cent.
Between 60 and 80	. 41.3 per cent.
Over 80	6.1 per cent.

100.0 per cent.

It will be seen that nearly one-half of all the deaths from diseases of the heart, were of persons over sixty years of age.

Diseases of the heart have acquired large importance as a cause of death. From 2.88 per cent. of specified causes of death, in 1865, heart diseases have gradually increased to 5.31 per cent., in 1882.

#### PNEUMONIA.

Next to consumption, the most fatal disease, or most prolific cause of death in Rhode Island, is pneumonia.

The number of deaths from pneumonia, in 1882, was 344. The proportion to total mortality from named causes was 7.16 per cent.

This number and percentage has been exceeded in several previous years. The proportion to whole number of specified causes of death, in 1881, was 6.5 per cent. In 1875 the proportion was 9.3 per cent.

Sex.—Of the 344 decedents from pneumonia and congestion of the lungs, in 1882, 178 were males, and 168 were females. The proportions were 107.2 males to each 100 females.

Parentage.—By parentage there were 163 of American, and 181 of foreign parentage.

The proportions were 90 of American to each 100 of foreign parentage, reversing the rule of previous years.

Season.—Season has a very decided influence in promoting the prevalence and fatality of pneumonia. Ordinarily, more than one-half of the mortality from pneumonia occurs during the first four months of the year.

The following Table shows, for each of the last eighteen years, the whole number of deaths reported in Rhode Island; the number and the percentage, with the sex and the parentage of the decedents from pneumonia, and the number in each year, in each division of the State:

TABLE LXV.

	ths.					P	NEUM	ONIA.					
	of De			SE	х.	PAREN	TAGE.		DIVISIO	ONS OF	THE S	STATE.	
YEARS.	Whole Number of Deaths.	Pneumonia.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County	Providence County Towns.	Providence City.	Washington County.
1865	3,405	175	5.1	80	95	110	65	8	11	21	49	74	12
1866	2,970	193	6.5	94	99	127	66	13	17	13	59	81	10
1867	2,889	172	5.9	68	104	103	69	8	12	12	56	68	16
1868	2,912	191	6.6	99	92	120	71	9	5	16	54	92	15
1869	3,382	190	5.6	104	86	110	80	7	10	10	63	88	12
1870	3,238	182	5.6	102	80	96	86	6	12	15	55	78	16
1871	3,344	218	6.5	104	114	129	89	12	21	11	68	85	21
1872	4,247	229	5.4	119	110	125	104	11	1	9	74	120	14
1873	4,403	234	5.3	127	107	143	91	11	9	10	65	123	16
1874	4,229	250	5.9	118	132	143	107	6	13	7	73	136	15
1875	4,317	400	9.3	199	201	243	157	14	27	25	105	198	31
1876	4,116	339	8.2	164	175	162	177	13	23	16	97	163	27
1877	4,450	226	5.1	104	122	127	99	10	7	14	81	98	16
1878	4,441	317	7.1	143	174	176	141	10	11	18	110	140	28
1879	4,472	311	7.4	148	163	163	148	7	15	15	103	156	15
1880	4,829	364	7.9	180	184	177	187	26	16	18	92	192	20
1881	5,016	327	6.5	177	150	190	137	10	23	17	81	174	22
1882	5,074	344	7.2	178	166	163	181	10	22	24	91	176	21
Totals, 18 years	71,734	4,662	*6.5	2,308	2,354	2,607	2,055	191	255	271	1,376	2,242	327

Sex.—An inspection of the above Table will show that the excess of female decedents from pneumonia, in the aggregate of a period of eighteen years, is very small, scarcely more than an average of two and one-half in each year.

Parentage.—With regard to parentage, there is a striking difference in the proportions of the aggregates of eighteen years.

Of the 4,662 decedents from pneumonia, during that period, 2,607 were of American, and 2,055 of foreign parentage.

The proportions were, therefore, 126.8 decedents of American parentage to every 100 of foreign.

<sup>\*</sup> Percentage of total mortality.

### TABLE LXVI.

Exhibiting the number of decedents from pneumonia, in each of the several periods of life, during each of the last eighteen years, from 1865 to 1882 inclusive.

YEARS.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	65	4	2		14	11	15	17	21	21	5	
1866	57	4	4	5	12	10	14	21	25	32	9	
1867	57	9	2	3	10	11	13	16	25	13	12	1
1868	70	4	3	3	15	8	16	13	19	27	13	
1869	64	11	1	2	11	12	9	28	25	16	11	
1870	84	6	5	4	6	7	8	14	20	19	8	1
1871	71	7	2	7	10	17	16	16	35	17	19	1
1872	83	5	1	7	17	20	19	22	24	19	11	1
1873	105	4	8	3	10	14	16	17	24	28	10	
1874	76	9	4	6	17	17	25	21	40	27	8	
1875	120	9	3	8	22	30	35	39	61	43	28	2
1876	116	5	4	3	20	20	32	35	48	39	17	
1877	79	2		7	15	15	24	27	22	24	9	2
1878	115	9	4	10	14	17	28	20	42	45	13	
1879	102	8	1	3	14	27	26	35	38	38	9	
1880	95	18	3	16	14	33	37	46	47	43	12	
1881	102	4	2	5	15	22	26	45	48	31	26	1
1882	71	3	4	14	22	36	49	33	41	46	21	4
		—	—			_			_			_
Total	1532	121	53	106	258	327	408	465	605	523	251	13

Of the 4,662 decedents from pneumonia, during the period of eighteen years, 1,532, or just about one-third, were under five years of age. During the period of life of over fifty years of age, the number of decedents was 1,644, or considerably more than one-third of the whole number.

The following summary will present the percentages in round numbers:

Under five years of age	33 per cent.
Five years and under twenty	9 per cent.
Twenty years and under fifty	22 per cent.
Fifty years and over	36 per cent.

#### SCARLATINA.

The number of decedents from scarlatina, during 1882, was 45, which is smaller, with a single exception, than in any one of the last twenty-eight years.

Sex.—Of the 45, there were 24 males and 21 females. During a period of twenty-eight years, as shown in the Table below, of the 4,250 decedents from scarlatina, 2,058 were males, and 2,192 were females, a proportion of 106.5 females to every 100 males.

Parentage.—Of the 45 decedents, in 1882, there were 9 of American parentage, and 34 of foreign, a difference which resulted from accidental circumstances, and could not occur in an extended epidemic.

During a period of eighteen years, covering the whole time of reporting the parentage of decedents, that is, from 1865 to 1882 inclusive, there were 2,994 deaths from scarlatina, of which 1,387 were of American parentage, and 1,607 of foreign, a proportion of 116 of foreign parentage to every 100 of American.

Season.—By reference to Table LX. it will be seen that season exerts a very decided influence upon the mortality from scarlatina. During a period of thirty years the aggregated monthly mortalities show that the largest number of deaths occurred in December, the next largest in January, and so gradually diminishing with almost exact regularity from month to month, until the minimum was reached in September, then gradually increasing from month to month, until the maximum was reached again in January.

The mortality from scarlatina, in the different months of the year, is in a considerable measure indicative of the months in which occurs the largest and smallest prevalence of the disease, inasmuch as a large or small prevalence would be a necessary corollary of a large or small mortality.

The following Table will present the statistics of scarlatina for each of the last twenty-eight years, from 1855 to 1882 inclusive, the whole number of deaths in the State during that period, the number and percentage and sex of the decedents from scarlatina, and the number from scarlatina in each division of the State. It also shows, from 1865 to 1882 inclusive, the parentage of the decedents from scarlatina:

TABLE LXVII.

	ths.					S	CARL	ATINA			to the late of the		
	r of Dea			SE	x.	PAREN	TAGE.		DIVISIO	NS OF	THE	STATE.	
YEARS.	Whole Number of Deaths.	Searlatina.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1855	1,846	71	3.8	41	30			22		1	6	42	
1856	2,042	208	10.2	109	99			3	1	3	57	144	
1857	2,325	147	6.3	69	78				20	47	47	32	1
1858	2,616	234	8.9	118	116			5	11	75	61	72	10
1859	2,270	71	3.1	34	37			5	2	4	14	45	1
1860	2,686	64	2.4	31	33			4	3	7	17	17	16
1861	2,927	57	1.9	24	33			2	2	7	9	28	9
1862	2,591	47	1.8	25	22			3	4	3	19	14	4
1863	3,207	91	2.8	40	. 51			1		23	24	33	10
1864	3,360	266	8.0	120	146			1	19	19	80	141	6
1865	3,405	255	7.5	130	125	134	121	33	17	3	86	108	8
1866	2,970	28	0.9	15	13	12	16	5		8	12	3	
1867	2,889	14	0.5	6	8	10	4	1		1	2	10	
1868	2,912	93	3.2	47	46	32	61	2	3	3	34	50	1
1869	3,382	286	8.4	126	160	128	158	17	23	12	72	138	34
1870	3,238	75	2.3	37	38	28	47	1	6	3	22	35	8
1871	3,344	66	1.9	41	25	31	35	1	3	1	37	21	13
1872	4,247	53	1.2	22	31	22	31		1	4	27	19	2
1873	4,403	287	6.5	124	163	163	124	4	2	42	80	132	27
1874	4,229	462	10.9	231	231	176	286	27	17	1	133	268	16
1875	4,317	185	4.3	85	100	121	64	8	30	3	35	94	15
1876	4,116	80	1.9	34	46	42	38	8	2	7	21	35	12
1877	4,450	62	1.4	26	36	29	33	14	4	3	21	12	8
1878	4,441	86	1.9	41	45	35	51	3	5	3	14	57	4
1879	4,472	311	7.4	164	147	130	181	3	6	4	37	255	6
1880	4,829	468	10.0	215	253	216	252	22	30	11	143	243	19
1881	5,016	138	3.0	79	59	62	76	11	25	12	41	45	4
1882	5,074	45	0.9	24	21	16	29		3	16	7	18	1
Totals, 28 years	97,604	4,250	4.6	2,058	2,192	1,387	1,607	201	239	326	1,148	2,111	225

### COMPARATIVE RESULTS.

The following Table presents the percentage of total mortality from specified causes of death, resulting from several prominent causes, as reported in 1882 in the whole State, and in the several divisions of the State:

TABLE LXVII.I

CAUSES OF DEATH.	Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State, 1882.
Accidents (all kinds)	2.75	2.44	3.45	3.82	3.56	3.46	4.17	3.44
Apoplexy and Paralysis	8.20	10.07	9.48	4.96	4.31	5.24	6.97	5.52
Brain, Diseases of	2 19	3.48	2.58	1.53	4.71	3.36	2.79	3.60
Bronchitis	1.64	.69	.86	1.91	1.66	2.69	1.86	2.08
Cancer	2.73	5.21	3.45	1.91	2.85	2.60	3.72	2.75
Cholera Infantum	10.93	3.82	4.31	5.34	8.74	5.83	6.05	6.77
Consumption	19.67	17.71	12.07	12.22	14.83	15.73	13.49	15.33
Convulsions	1.09	1.39	2.59	3.05	2.53	2.37	.93	2.29
Croup	.55	.69	.86	1.91	2.19	1.43	1.40	1.60
Debility	6.56	2.43		2.67	4.58	1.25	2.79	2 69
Diarrhœa	.55	.35		1.52	2.85	1.84		1.87
Diphtheria		1.04	.86	1.15	1.92	2.15	7.91	2.10
Dysentery	.55	1.04	14.65	2.68	.93	1.03	1.40	1.42
Fevers	3.28	3.82	1.72	1.15	3.51	6.27	2.79	4.60
Heart, Diseases of	4.37	5.55	4.31	6.87	3.64	6.37	5.12	5.31
Hooping Cough		1.39			1.72	1.79	.46	1.48
Hydrocephalus	.55	.35		.76	.99	1.25	.93	1.02
Kidneys, Diseases of	1.09	1.74	5.17	1.53	.99	2.33	.93	1.79
Liver, diseases of	1.09	1.74	1.72	2.67	1.06	1.08	.93	1.21
Marasmus	2.19	.69	.86	1.15	1.59	1.93	.46	1.62
Old Age	10.93	8.68	12.07	9.92	7.03	3.54	6.05	5.89
Pneumonia	5.47	7.63	5.17	6.97	6.03	7.89	9.77	7.16
Scarlatina		1.04		6.11	.46	.81	.46	.94

An examination of the preceding Table will show the varying proportions of mortality from different causes of death, in the several divisions of the State, during 1882.

These proportions, it will be understood, are in relation to whole number of deaths from stated causes, and not in proportion to population.

In Bristol county, ten of the several leading causes of death rank in the order of largest number, as follows: 1, consumption; 2, old age; 3, cholera infantum; 4, apoplexy; 5, debility, a rather indefinite term; 6, pneumonia; 7, diseases of the heart; 8, fevers; 9, accidents; 10, cancer.

In Kent county: 1, consumption; 2, apoplexy; 3, old age; 4, pneumonia; 5, diseases of the heart; 6, cancer; 7, and 8, cholera infantum and fevers, equal; 9, diseases of the brain; 10, accidents.

In Newport county towns: 1, dysentery; 2, and 3, consumption and old age, equal; 4, apoplexy; 5, and 6, pneumonia and diseases of the kidneys, equal; 7, and 8, cholera infantum and diseases of the heart, equal; 9, and 10, accidents and cancer, equal.

In Newport city: 1, consumption; 2, old age; 3, pneumonia; 4, diseases of the heart; 5, scarlatina; 6, cholera infantum; 7, apoplexy; 8, accidents; 9, convulsions; 10, dysentery.

In Providence county towns: 1, consumption; 2, cholera infantum; 3, old age; 4, pneumonia; 5, diseases of the brain; 6, debility; 7, apoplexy; 8, diseases of the heart; 9, accidents; 10, fevers.

In Providence city: 1, consumption; 2, pneumonia; 3, diseases of the heart; 4, fevers; 5, cholera infantum; 6, apoplexy; 7, old age; 8, accidents; 9, diseases of the brain; 10, bronchitis.

In Washington county: 1, consumption; 2, pneumonia; 3, diphtheria; 4, apoplexy; 5, and 6, old age and cholera infantum, equal; 7, diseases of the heart; 8, accidents; 9, cancer; 10, diseases of the brain.

In the whole State, the order of cause of largest number of deaths is given in Table LII.

It may be of interest to ascertain the varying proportions of deaths from a number of the leading causes in the whole State, during a period of several years, which are presented on the following page.

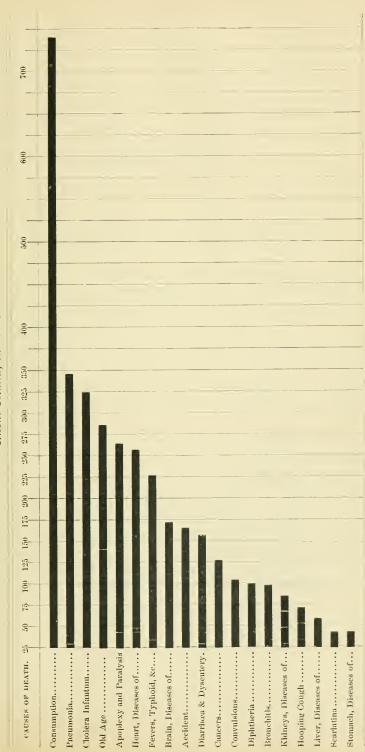
The following Table shows the percentages of several prominent causes of death, in the aggregate of total mortality from specified causes in Rhode Island, during a period of eight years, from 1875 to 1882 inclusive:

TABLE LXIX.

				YEA	.RS.			
CAUSES OF DEATH.	1882.	1881.	1880.	1879.	1878.	1877.	1876.	1875.
Accidents (all kinds)	3.44	3.04	3.51	2.43	2.89	3.10	2.94	3.24
Apoplexy and Paralysis	5.52	5,23	4.67	5.21	4.45	4.25	4.22	4.03
Brain, Diseases of	3.60	3.84	3.44	3.73	3.28	3.68	3.75	1.95
Bronchitis	2.08	1.80	1.98	1.47	1.89	1.62	1.46	1.39
Cancer	2.75	3.11	2.72	2.96	2.82	3.17	2.72	2.31
Cholera Infantum	6.77	5.15	5.43	3.81	3.97	6.08	6.41	7.74
Consumption	15.33	15.12	14.02	15.09	15.98	15.52	16.78	15.79
Convulsions and Fits	2.29	2.18	2.88	2.47	2.65	1.95	2.28	2.43
Croup	1.60	2.16	1.45	2,28	2.20	2.23	2.61	2 33
Debility	2.69	2.61	3.09	2.35	1.91	2.65	2.80	4.01
Diarrhœa	1.87	1.65	1.52	1.26	1.25	2.11	1.87	1.70
Diphtheria	2.10	4.63	3.40	6.14	10.28	11.56	4.07	.80
Dysentery	1.42	.90	.61	1.04	.95	1.22	1.28	.88
Fevers	4.60	3.05	3.37	2.70	3.94	3.55	3.69	4.14
Heart, Diseases of	5.31	5.68	5.03	4.78	3.92	4.28	4,25	4.52
Hooping Cough	1.48	1.46	.44	1.02	1.28	.75	1.23	.75
Hydrocephalus	1.02	1.20	1.01	1.36	1.65	1.29	1.74	1.24
Kidneys, Diseases of	1.79	1.69	2.02	1.88	1.89	1.57	1.28	1.58
Liver, Diseases of	1.21	.92	1.20	1.17	1.06	1.06	1.13	1.04
Marasmus	1.62	1.11	1.27	1.16	1.30	.99	1.13	1.46
Old Age	5.89	5.29	5.95	5.22	5.25	5.00	6.18	5.25
Pneumonia	7.16	7.01	7.90	7.37	7.49	5.31	8.69	9.73
Scarlatina	.94	2.96	9.99	7.37	2.03	1.46	2.05	4.50



Diagram III. Exhibiting the comparative mortality by absolute number of decedents, from twenty prominent causes of death in Rhode Island, in 1882.



It will be seen that the width of each of the perpendicular spaces represents twenty-five decedents,



# APPENDIX.

## NOMENCLATURE OF DISEASES.

The nosological classification employed in the preparation of these Reports, has heretofore been substantially that adopted by Thomas H. Webb, M. D., in the preparation of the first of the series, for the year ending May 31, 1853.

In order that the classification in the Rhode Island Reports may conform more nearly to the nosology employed in European countries, and largely in the United States and Dominion of Canada, the classification hereunto appended, will hereafter be employed in the preparation of these Reports.

As the Rhode Island Reports upon the Vital Statistics of the State are published largely for popular distribution among the citizens of the State, and fall under the eye of many non-professional readers, it is presumed that it may be of some advantage to such readers that a general plan of the classes and orders now adopted should be presented, with such definitions or explanations of the terms used, as may assist in understanding the character and peculiarities of the diseases or causes of death which they represent. Such explanations are therefore attempted in the scheme presented on the following page:

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## NOMENCLATURE OF DISEASES.

CLASSES. TE	ECHNICAL TERMS.	SIGNIFICATION.			
I.—ZYMOTIC.	Zymotici.	Fermenting, chemical or organic decomposition or change in the fluids and solids.			
II.—CONSTITUTIONAL.	Cachectici.	Bad conditions. Generally abnormal or unsound state of the body.			
III.—LOCAL.	Monorganici.	Affections or derangements of single organs or functions.			
IV.—DEVELOPMENTAL.	Metamorphici.	Changed forms or shapes. Derangements and diseases of growth and nutrition.			
V.—VIOLENT.	Thanatici.	Deaths by injury or force.			
CLASS I.					
ORDERS.	TERMS.	CAUSATION.			
1.—Miasmatic Diseases.	Miasmati	ci. From Infection; pollu-			
2.—Enthetic Diseases.	Enthetici.	At a m			
3.—Dietic Diseases.	Dietici.	planted infection.			
4.—Parasitic Diseases.	Parasitic	From modes of living, habits, diet, &c. From Parasites.			
	CLASS II.				
ORDERS.	TERMS.	SIGNIFICATION.			
1.—Diathetic Diseases.	Diathetici	. Unsonnd or morbid			
2.—Tubercular Diseases.	Phthisici.	condition.  Wasting; emaciation.			
CLASS III.					
ORDERS.					
Diseases of	TERMS.	SIGNIFICATION.			
1.—Nervous System.	Cephalici	Of the Head.			
2.—Organs of Circulation		Of the Heart.			
3.—Organs of Respiratio		ci. Of the Lungs.			
4.—Organs of Digestion.		Of the Intestines.			
5.—Organs of Urination		i. Of the Kidneys.			
6.—Organs of Generatio		Of the Pudenda.			
7.—Organs of Locomotic 8.—Integumentary Syste		Of the Muscles and Bones. Of the Skin.			

### CLASS IV.

#### ORDERS.

Developmental Diseases.	TERMS.	SIGNIFICATION.
1.—Of Children.	Paidiaci.	Of Youth.
2.—Of Women.	Gyniaci.	Of Adult Females.
3.—Of Old Persons.	Geratici.	Of Old Age.
4.—Of General Nutrition.	A trophici.	Of Malnutrition.

### CLASS V.

ORDERS.	TERMS.	SIGNIFICATION.
1.—Accident.	Tichici.	Chance.
2.—Homicide.	And rophonici.	Man killing.
3.—Suicide.	Autophonici.	Self killing.

## STATISTICAL NOSOLOGY.

#### ADOPTED FOR THE RHODE ISLAND REPORTS.

On the following pages will be found two lists of the causes of death.

The Tabular List, on the following pages, comprises all the principal or primary diseases or causes of death which will be used in Table X. on Classification and Percentage, in the preparation of the Reports, and will therefore include all those named in the Supplemental List when the final arrangement is completed.

The Supplemental List is subordinate to the first, and contains the special causes of death in addition to the first, which find a place and name in the usual Returns of Death, as reported to the State Registrar. These will all have a place in alphabetical order in Tables VIII. and IX., and will be variously grouped under different heads in Table X., as shown by the figures in the Tabular List that correspond with the figures in the Supplemental List.

It should be stated that the nosology adopted is not that *proposed* some years since by the Registrar General of England, pending a revised nomenclature, but is in conformity with that of more largely universal use.

## STATISTICAL NOSOLOGY.

TABULAR LIST.	SUPPLEMENTAL LIST.	
	Of Diseases of Special Character (or	
CLASS I.—ZYMOTIC DISEASES.	Synonymes).	
ORDER I.—Miasmatic.  I. 1.—1. Small-pox	I. 1.—1. Small-pox; vaccination not stated. Small-pox (second attack). After vaccination (varioloid). Erysipelas, &c., after vaccination. Chicken-pox. Miliaria. 2. Rothelu. 3. Angina maligna. 5. "Spotted Fever." 6. Mumps. Tonsillitis. 9. Typhus Fever. 10. Pyemia. Hospital Gaugrene. Erythema.	
13. Influenza	11. Childbed fever.	
15. Diarrhea	11. Childbed fever. 12. Anthrax. 18. Intermittent Fever.	
18. Ague	19. Yellow fever. 20. Rheumatism, with pericarditis, or disease of heart.	
Order 2.—Enthetic.  I. 2.—1. Syphilis	I. 2.—2. Gonorrhea. Purulent ophthalmia. 6. Necusia (usually from dissection wounds),	
Order 3.—Dietic.  I. 3.—1. Privation	I. 3.—1. Want of breast milk. 2. Rickets. Bronchocele.	
ORDER 4.—Parasitic.  1. 4.—1. Thrush	I. 4.—2. Porrigo. Scabies. Tape worm. Hydatids. Trichiniasis.	
Order 1.—Diathetic.		
II. 1.—1. Gout 2. Dropsy	II. 1.—3. Leucocythemia. 4. Soft cancer. Epithelioma. Melanosis. Other kinds of cancer. Lupus. 6. Bed-sore. Dry gangrene.	

### CAUSES OF DEATH.

#### TABULAR LIST. SUPPLEMENTAL LIST. CLASS II.—(CONTINUED.) ORDER 2. - Tubercular. II. 2.—1. Psoas (Lumbar) abscess. White swelling. II. 2.—1. Scrofula 2. Tabes Mesenterica Cretinism (Goitre). Adenitis, Cellulitis. 3. Phthisis (Consumption of Lungs) 2. Tubercular peritonitis. 3. Hæmoptysis. 4. Tubercular meningitis. 4. Hydrocephalus . . CLASS III.-LOCAL DISEASES. III. 1.—1. Phrenitis. Myelitis. 4. Monomania. Order 1.—Nervous System. ORDER 1.—Ne III. 1.—1. Cephalitis 2. Apoplexy 3. Paralysis 4. Insanity 5. Chorea 6. Epilepsy 7. Tetanus 8. Convulsions 9. Rygin Disagree Fright. Grief. Melancholia. Rage. 6. Hysteria. 8. Laryngismus stridulus. 9. Neuralgia. Neurasthenia. Ophthalmia. Otitis. Disease of spinal nerve. Necrencephalus (Kamollisse-9. Brain Diseases, \* &c. ment). Order 2.—Organs of Circulation. III. 2.-1. Carditis. III. 2.—1. Pericarditis Endocarditis. 2. Aneurism 3. Hypertrophia. 3. Heart Diseases, &c. Angina pectoris. Syncope. Arteritis. ORDER 3 .. - Respiratory Organs. Phlebitis. III. 3.—1. Epistaxis Hydropericardinm. 2. Laryngitis III. 3.-2. Œdema glottidis. 3. Bronchitis 4. Empyema. 4. Pleurisy Diaphragmitis. 5. Pneumonia. Pneumothorax. Pulmonary apoplexy. Congestion of Lungs. 6. Asthma 7. Lung Diseases, &c. 6. G'inders' asthma. Miners' asthma. Emphysema. Order 4.—Digestive Organs. III. 4.—1. Gastritis III. 4.-1. Glossitis 2. Enteritis Stomatitis Pharyngitis 3. Peritonitis Œsophagitis. 4. Ascites 5. Perforation of-5. Ulceration of Intestines 6. Congenital. Femoral. 6. Hernia. Inguinal. 7. Ileus Scrotal. 8. Intussusception Umbilical. Ventral. 9. Stricture of Intestines 7. Constipation. 9. Strict. esophagus. 10. Fistula 11. Stomach Diseases, &c. 11. Dyspepsia. 12. Pancreas Diseases, &c. 13. Hepatitis 14. Jaundice Pyrosis. Gastralgia, Hæmatemesis. Melæna. 15. Liver Disease, &c.16. Spleen Disease, &c. Hemorrhoids. Gall-stones. Cirrhosis.

<sup>\*</sup> Diseases of the hrain, or nervous system, not otherwise placed, are referred to this head. The remark also applies to the corresponding heads and related diseases, in other orders of this class.

<sup>†</sup> See also I. 1 .- 20.

## STATISTICAL NOSOLOGY.

TABULAR LIST.	SUPPLEMENTAL LIST.
CLASS III.—(CONTINUED.)  ORDER 5.— Urinary Organs.  III. 5.—1. Nephritis	III. 53. Albuminuria. 6. Cystirrhœa. 7. Diuresis. Hæmaturia. Disease of bladder.
Order 6.—Generative Organs. III. 6.—1. Ovarian Dropsy	III. 6.—1. Ovarian tumor.  2. Hysteritis, Metritis (inflammation of womb).  Uterine tumor.  Polypus uteri.  Ovaritis.
ORDER 7.—Organs of Locomotion.  III. 7.—1. Arthritis	III. 7.—1. Ostitis. Periostitis. 2. Fragilitas ossium. Mollities ossium. Caries. Necrosis. Exostosis. Hip disease. Spine disease (vertebræ).
Order 8.—Integumentary System. III. 8.—1. Phlegmon	III. 8.—1. Abscess (part not stated). Boil. Whitlow. 3. Roseola. Urticaria. Eczema. Herpes. Pemphigus. Ecthyma. Impetigo. Psoriasis, &c.
CLASS IV.—Developmental Diseases.  Order 1.—Developmental Diseases of Children IV. 1.—1. Still-born	IV. 1.—2. Atelectasis. 5. Anus imperforatus. Cleft palate. Idiocy.

### CAUSES OF DEATH.

### TABULAR LIST.

### CLASS IV.—(CONTINUED.)

Order 3.—Developmental Diseases of Old People.

IV. 3.—1. Old Age

ORDER 4.—Diseases of Nutrition. IV. 4.—1. Atrophy and Debility . . .

### CLASS V.-VIOLENT DEATHS.

Order 1.—Accident or Negligence.
V. 1.—1. Fractures and Coutusions .
2. Wounds . . .
3. Burns and Scalds . . .
4. Poison . . . . .
5. Drowning . . . .

6. Suffocation . . .7. Otherwise (See Sup. List.)8. "Casualty" (Not Stated.)

ORDER 2.—Battle.

ORDER 3.—Homicide.

Order 5.—Execution.

V. 5.—1. Hanging. . . .

Sudden, cause unascertained

### SUPPLEMENTAL LIST.

IV. 2.—1. Chlorosis.
Climacteria,
Menorrhagia.
2. Miscarriage.
Abortion
Puerperal Mania.
Puerperal convulsions,
Phlegmasia dolens.
Cæsarian operation.
Extra-uterine feetation.
Flooding.
Retention of placenta.
Presentation of placenta.
Deformed pelvis.

Breast abscess.

V. 1.-1. Railroad accidents.

5. Lost at sea.
6. Asphyxia.
Strangulation.

7. Exposure.
Cold water.
Frozen.
Heat.
Lightning.
Surgical operation.



### THE LAWS OF RHODE ISLAND

IN RELATION TO

### Vital Statistics, the State Board of Health, Marriage and Divorce.

### PUBLIC STATUTES, CHAPTER 85.

### OF THE REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES.

Section 1. The town clerks of the several towns, or any person whom the board of aldermen of any city, or the town council of any town may appoint for that purpose, shall obtain, chronologically record and index, as required by the forms prescribed by section three of this chapter, all information concerning births, marriages and deaths occurring among the inhabitants of their respective towns; and on or before the first Monday in March, annually, shall make duly certified returns thereof to the secretary of the state board of health for the years ending on the thirty-first day of December next preceding, accompanying the same with a list of the persons required by law to make returns to them, who have neglected to do so, and with such remarks relating to the object of this chapter as they may deem important to communicate.

- SEC. 2. The secretary of the state board of health shall receive the returns made in pursuance of the preceding section, and annually, make a general abstract and report thereof, in form as prescribed by section three of this chapter, and publish not exceeding one thousand copies thereof. Said returns, after such report is prepared, shall be deposited in the office of the secretary of state, who shall cause the same to be arranged, full alphabetical indices of all the names to be made, and the whole to be bound in volumes of convenient size, and carefully preserved in his office.
- SEC. 3. The blank forms required to carry out the provisions of this chapter, shall, on application, be furnished by the secretary of the state board of health to clergymen, physicians, undertakers, town clerks, clerks of meetings of the Society of Friends and other persons requiring them, substantially as follows:

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The record of a birth shall state the date and place of birth, name and sex of the child, whether born alive or still-born, the name and surname, color, occupation, residence and birthplace of the parents, and the time of recording, so far as the same can be ascertained. The record of a marriage shall state the date of the marriage, place, name, residence and official station of the person by whom married, names and surnames of the parties, age, color, occupation and residence of each, condition, that is whether single or widowed, what marriage, that is whether first, second, third or other marriage, the occupation, birthplace and name of their parents, and the time of recording, so far as the same can be ascertained. The record of deaths shall state the date of death, name and surname of deceased, the sex, color and condition, whether single or married, age, occupation, place of death, place of birth, names and birthplace of parents, disease, or cause of death, and the time of recording, so far as can be ascertained.

- SEC. 4. Every meeting of the Society of Friends, clergyman, and all others authorized to join persons in marriage, shall make a faithful record of every such rite performed by them, in manner and form aforesaid, and return the same for the last preceding month, on or before the second Monday of every month, to the town clerk of the town in which such rite shall have been performed; and no marriage shall be solemnized until the parties shall have signed and delivered to the person about to solemnize it, or to the clerk of a meeting of the Society of Friends, a certificate containing the information required for the record of a marriage, as prescribed by this chapter.
- SEC. 5. The town clerk of every town shall annually, in the month of January, collect the information required by this chapter, in relation to all children born in the town during the year ending on the thirty-first day of December next preceding.
- SEC. 6. Whenever any person shall die, or any still-born child shall be brought forth in this state, the physician attending at such bringing forth or last sickness, if any physician so attended, shall within forty-eight hours after such death or bringing forth, leave with the family, if any, or person having the care of the deceased, or the person bringing forth such still-born child, or give to the undertaker or person who conducts the funeral, a certificate stating in case of a death the name of the deceased, the date of the death, and the disease or cause of the death, and in case of the bringing forth of a still-born child, the date and the cause of such child being brought forth still-born.
- SEC. 7. Every town council may appoint a sufficient number of persons to act as undertakers, removable at the pleasure of such council.
- SEC. 8. No undertaker or other person shall conduct a funeral, or bury or deposit in a tomb, or remove from this state or otherwise dispose of the remains of any deceased person or still-born child, unless he shall first obtain the physician's certificate required by section six of this chapter, if a physician was in attendance upon such person who has deceased, or the person bringing forth

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such still-born child, and shall return the same, together with his own certificate of the information required by section three of this chapter, to the town clerk of the town where such death or bringing forth took place.

- SEC. 9. Any town may make ordinances, more effectually to attain the objects herein contemplated.
- SEC. 10. The town clerks, or persons appointed as aforesaid, shall receive for each record of a death made and returned as required by law, and for each record of a marriage made and returned as required by law, twenty cents, to be paid to them out of their respective town treasuries: *Provided*, that the yearly compensation to be paid out of the town treasury as aforesaid, to any one town clerk or person appointed as aforesaid, who shall perform the duties prescribed by this chapter, shall not be less than five dollars. Undertakers and others making returns of deaths as required by section eight of this chapter, shall receive for each full report of a death made to the town clerk, five cents, in the cities of Providence and Newport, and ten cents in the other towns of the state.
- Sec. 11. Every clergyman, physician, undertaker, town clerk, clerk of any meeting of the Society of Friends, or other person, who shall wilfully neglect or refuse to perform any of the duties imposed on, or required of him, by this chapter, shall be fined not exceeding twenty dollars for each offence, one half thereof to the use of the town in which the offence shall occur, and one half thereof to the use of the person who shall complain of the same.
- Sec. 12. Every clergyman, physician, coroner, undertaker or clerk of any meeting of the Society of Friends, shall cause his name and residence to be recorded in the town clerk's office of the town where he resides.
- SEC. 13. No letters of administration or letters testamentary shall be granted by any court of probate, upon the estate of any person, until the death of such person, or the facts from which the same is presumed, shall be duly certified, as near as may be, to the town clerk, in order that the same may be duly registered according to the provisions of this chapter.
- SEC. 14. The town clerks of the several towns, the city clerk of the city of Newport, and the city registrar of the city of Providence, shall have the custody of all records of births, deaths and marriages of their respective towns, whether made under the statutes now in force or any former statute, and a certificate signed by them, certifying that any written or printed statement of any marriage, birth or death is a true copy of the record in their custody, shall be admitted as evidence of such marriage, birth or death.
- Sec. 15. Births, marriages and deaths of non-residents shall be distinguished from those of residents in the returns, by being arranged separately.
- SEC. 16. The secretary of the state board of health may, from time to time, vary the forms of returns, and require such additional information as he may consider necessary to accomplish the object of this chapter.
- Sec. 17. The town clerks or other officers appointed under this chapter to collect, record and return the births in the several towns, shall receive fees

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therefor as follows: For making record and return of these facts as required by law, twenty cents each for the first fifty entries in each calendar year, and ten cents each for each subsequent entry and return; to be paid by the town in which the birth is recorded.

SEC. 18. The town clerks of the several towns, or other persons appointed under this chapter to collect the births in the several towns, shall annually in the month of January, collect the facts concerning the births within their respective towns, required by this chapter; and shall so far as practicable, at the same time collect the names of all persons liable to be enrolled in the militia, as required by title thirty-four; and the census of all persons between the ages of five and fifteen years inclusive, as provided by chapter fifty; and shall receive therefor such compensation as the town council or the board of aldermen of their respective towns or cities shall determine: *Provided*, that the city of Providence shall be exempt from so much of the provisions of this section as relates to the collection of the statistics of births.

SEC. 19. Blanks for the foregoing purposes shall be furnished, on application therefor, on or before the first day of December in the year preceding, by the state board of health, for the collection of births, by the adjutant-general, for the taking of the enrolled militia, and by the commissioner of public schools, for the census aforesaid.

SEC. 20. The person or persons who shall discharge the duties required by section eighteen of this chapter, if other than the town clerk, shall make full return thereof to the town clerk of his or their town, on or before the tenth day of February next following.

SEC. 21. The returns required to be made by clerks of the supreme court, in relation to divorces, to the secretary of the state board of health, or a prepared abstract thereof, shall be published in the annual report on the births, marriages and deaths in the state.

### CHAPTER 83.

### OF THE STATE BOARD OF HEALTH

Section 1. The governor, with the advice and consent of the senate, shall appoint six persons, two from the county of Providence, and one from each of the other counties, who shall constitute the state board of health, one of whom shall be appointed in each year for the term of six years from the first day of July. Any appointment to fill a vacancy shall be for the remainder of the term. Of the persons so appointed, at least three shall be well educated physicians and members of some medical society incorporated by the state. The governor may remove any member for cause, at any time, upon the written request of two-thirds of the board.

- SEC. 2. The board shall take cognizance of the interests of life and health among the citizens of the state. They shall make investigations into the causes of disease, and especially of epidemics and endemics among the people, the sources of mortality, and the effects of localities, employments, conditions and circumstances on the public health, and shall faithfully do all in their power to ascertain the causes and the best means for the prevention of diseases of every kind in the state. They shall publish and circulate, from time to time, such information as they may deem to be important and useful for diffusion among the people of the state, and shall investigate and give advice in relation to such subjects relating to the public health, as may be referred to them by the general assembly, or by the governor when the general assembly is not in session.
- SEC. 3. The state board of health shall also investigate the subject of diseases among cattle or other animals.
- SEC. 4. The board shall meet in the city of Providence once in three months, and as much oftener as they may deem necessary. No member of the board, except the secretary, shall receive any compensation for his services; but the actual personal expenses of any member, while engaged in the duties of the board, shall be paid by the state.
- Sec. 5. The board shall elect a well qualified physician as their secretary, who shall be *ex-officio* a member of the board, the commissioner of public health, and state registrar, but he shall not be permitted to vote on any question in which he is personally interested, or be entitled to any additional compensation for mileage or expenses.
- SEC. 6. The secretary of the said board shall make inquiry from time to time, of the clerks of town and local boards of health, and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health, in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals in their several towns and localities respectively; and the said clerks of town and local boards of health, and the said practising physicians, shall give such information, in reply to said inquiries, of such facts and circumstances as shall have come to their knowledge.
- SEC. 7. The secretary shall perform and superintend the work prescribed for said board by law, and such other duties as the board may require, and he shall receive such salary, not in excess of twelve hundred dollars annually, as the board may determine. He shall hold his office during the pleasure of the board, and may be removed at any regular meeting, by a majority vote of the members thereof.
- SEC. 8. The governor shall provide a suitable office for the board in the city of Providence, and the actual expenses of the board and of the members thereof, when certified by the chairman and approved by the governor, shall be paid from the state treasury.

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SEC. 9. The board shall make a report in print to the general assembly, annually, of its proceedings during the year ending on the thirty first day of December next preceding, with such suggestions in relation to the sanitary laws and interests of the state as they shall deem important.

### SYNOPSIS OF THE LAW OF MARRIAGE.

### CHAPTER 163 PUBLIC STATUTES.

Sections 1, 2 and 3 show what kindred persons cannot marry, and declare marriages within prohibited degrees, null and void.

Section 4 makes an exception in favor of Jews, within the degrees of affinity or consanguinity allowed by their religion.

SECTION 5 declares the marriage of persons having a husband or wife living, and of idiots or of lunatics, absolutely void.

SEC. 6. "Any ordained minister or elder of any religious denomination, who shall be *domiciled* in this state, and either justice of the supreme court, may join persons in marriage in any town of the state." (It will be seen that clergymen from other states *cannot* LAWFULLY *solemnize marriages* in Rhode Island.)

Section 7 defines what shall be understood by the term "religious denomination," within the meaning of the preceding section.

Sec. 8. Wardens in the town of New Shoreham may join persons in marriage in said town.

Section 9 provides that no minister, elder, magistrate or warden shall join persons in marriage, unless such persons, if residents of this state, shall first present (to the clergyman or other persons officiating) a certificate properly executed and signed by the town or city clerk or city registrar of the town or city in which EACH of such persons shall RESPECTIVELY reside, and if not residents of this state, then from the town or city clerk or registrar of the town or city in which the marriage shall be solemnized, to the effect that the said town or city clerk or registrar has duly recorded the intention of marriage between the parties named in the certificate, the said certificate also setting forth the names and surnames of the parties, the age, color, occupation, birthplace, and residence of each, whether either or both have been before married, and if before married, whether the marriage intended is the first, second, third, or other marriage, and also whether the condition of either or both persons previously married is that of a divorced person, and the names, occupation and birthplace of each of their parents; and no town or city clerk or city registrar shall issue such certificate to any minor or person under guardianship, unless the consent in writing of the parent or guardian shall have been first obtained thereto, provided, however, such certificate may be issued to a female over eighteen years of age, who has no parent or guardian living in the United States. (The legal minority of both sexes terminates at the age of twenty-one.)

Section 10 provides that every Society of Friends, and every person authorized to join persons in marriage shall certify upon the certificate required in section nine of this chapter, the time when and the place where the marriage shall have been solemnized by him, and shall on or before the second Monday of every month, return the certificate of every marriage solemnized by him during the last preceding month, to the clerk or registrar of the town or city in which such rite shall have been performed.

Section 11 forbids the solemnization of the marriage ceremony, by any person, when lawful objection is made thereto in writing, until such lawful objection be removed.

Sections 12 and 13 provide that any person who shall join persons in marriage without first receiving the certificate required in section nine of this chapter, or otherwise contrary to, or in violation of, chapter 163 of the Public Statutes, shall be imprisoned not exceeding six months, or fined not exceeding one thousand dollars.

SECTION 14 provides that ALL PERSONS married without duly proceeding as required by chapter 163, shall be fined not exceeding fifty dollars.

SEC. 15. The solemnization of marriage shall be in the presence of two witnesses at least, besides the minister, elder or magistrate officiating.

Section 16 relates to marriages among Quakers or Friends, and among Jews, making them valid if in accordance with the forms, rites and ceremonies of the same respectively.

SECTION 17 provides that at least one of the parties to any marriage solemnized according to the manner and form of the Society of Friends, or rites and ceremonies of the Jewish religion, shall, before the celebration thereof, sign and deliver to the town or city clerk or city registrar, of the town or city in which such marriage is solemnized, the certificate required in section nine.

### CHAPTER 167.

### OF DIVORCE.

- SECTION 1. Divorces from the bond of marriage shall be decreed in case of any marriage originally void or voidable by law, and in case either party is for crime deemed to be or treated as if civilly dead, or, from absence or other circumstances, may be presumed to be naturally dead.
- SEC. 2. Divorces shall be decreed for impotency, adultery, extreme cruelty, wilful desertion for five years of either of the parties, or for such desertion for a

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shorter period of time in the discretion of the court, for continued drunkenness, for neglect or refusal on the part of the husband, being of sufficient ability, to provide necessaries for the subsistence of his wife; and for any other gross misbehavior and wickedness in either of the parties, repugnant to, and in violation of, the marriage covenant.

- SEC. 3. Whenever it shall appear that the absence, adultery, cruelty, desertion or other cause of complaint as aforesaid, was committed or occasioned by the collusion of the parties, and done or contrived with an intention to procure a divorce, in such case no divorce shall be decreed.
- SEC. 4. Whenever a divorce shall be had for the causes of affinity, consanguinity, impotency, idiocy, lunacy, or crime of either of the parties, the wife shall have restored to her all her lands, tenements, and hereditaments; and a judgment may be passed for a restoration to her of all or such part of the personal estate specifically, or the value thereof, which has come to the husband's hands by virtue of the marriage, as the court from the circumstances of the case shall deem equitable.
- SEC. 5. Whenever the divorce shall be occasioned by adultery, or other of the causes aforesaid, done or committed on the part of the wife, the husband shall hold the personal estate not secured to her by law, forever, and her real estate not secured to her by law, during his natural life, in case they have had issue born alive of her body during the marriage, otherwise during her natural life only, if he shall survive her.
- Sec. 6. The court may, in such case, allow the wife for her subsistence so much of her real and personal estate as they shall deem necessary or proper.
- SEC. 7. Whenever a divorce is granted for adultery, or crime on the part of the husband, the wife shall be entitled to dower in the same manner as if he were dead, unless the court shall decree alimony, chargeable upon the estate of the husband, instead of such dower.
- SEC. 8. Whenever a divorce shall be had for adultery, or for any of the causes aforesaid done or committed on the part of the husband, the wife shall continue to hold all her property, real and personal, secured to her by law, free from any right in, or control over, her disposition of the same, either during her life or at her death: and, if there be no issue living, shall be restored to all other her lands, tenements, and hereditaments, if any there be.
- SEC. 9. In such case the wife shall also be allowed, out of the real or personal estate of the husband, or out of both, such alimony as the court shall think reasonable, not exceeding the use of one moiety of his real estate, during the life of the wife, and the property of one-half of his personal estate, having regard to the personal property which came to the husband by the marriage, and his ability.
- Sec. 10. If there be issue living at the time of the divorce, the court, with regard to ordering restoration to the wife of such of her lands, tenements, or hereditaments, if any, as may not be secured to her by law, and in regard to the

amount of alimony to be allowed to her out of the property of the husband, may do as they shall judge the circumstances of the case may require.

- SEC. 11. Divorces from bed, board, and future cohabitation, until the parties be reconciled, may be granted for any of the causes for which by law a divorce from the bond of marriage may be decreed, and for such other causes as may seem to require the same.
- SEC. 12. In case of such divorce, the court may assign to the petitioner a separate maintenance out of the estate or property of the husband or wife, as the case may be, in such manner, and of such amount, as they may think necessary or proper.
- SEC. 13. Every petition shall be signed by the petitioner, if of sound mind and of legal age to consent to marriage, otherwise, upon application to the court, and after notice to the party in whose name the petition shall be filed, the court may allow such petition to be signed by a guardian or next friend.
- Sec. 14. All jurisdiction over divorce, alimony, separate maintenance, or the custody, education, and support of the children of persons divorced or petitioning for a divorce, is vested in the supreme court.
- SEC. 15. Said court shall have no cognizance of, or jurisdiction over, any petition for the same, or either of the same, unless the petitioner shall, at the time of preferring such petition, be a domiciled inhabitant of this state, and have resided therein for the period of one year, next before the preferring of such petition.
- SEC. 16. All such petitions shall be filed, heard, and tried in the county in which the petitioner shall reside.
- Sec. 17. The said court may, by general rule or otherwise, prescribe the notice to be given, within or without the state, on such petitions, and may issue such process as may be necessary, to carry into effect all powers conferred upon them in relation to the same.

Sections 18, 19 and 20 contain provisions in relation to citations to adverse party residing without the state, or in parts unknown.

SEC. 21. Whenever any citation, issued under the provisions of this chapter, shall be served by a disinterested person, such person shall return the same, having made oath thereon of the place where, the time when, and the manner in which he shall have made service of the said citation.

SECTION 22 provides for giving and ensuring proper and sufficient notice to the adverse party.

SEC. 23. The said court is empowered to regulate the custody, and provide for the education, maintenance, and support of the children of all persons by them divorced or petitioning for a divorce, and of all persons to whom a separate maintenance may be granted, or who may petition for the same; to make such allowance to the wife, out of the estate of her husband, for the purpose of enabling her to prosecute or defend against any such petition for divorce or separate maintenance, in case she has no property of her own, available for such purpose,

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as they may think reasonable and proper; and to make all necessary orders and decrees concerning the same, and the same at any time to alter, amend and annul for sufficient cause, after notice to the parties interested therein.

SEC. 24. The said court may authorize a married woman to whom a divorce from the bond of marriage is decreed to change her name, with the same rights and liabilities as if her name had not been changed.

SEC. 25. After the filing and during the pendency of any petition under this chapter, the supreme court may, as in equity, make such interlocutory decrees, or grant such temporary injunctions, as may be necessary, until a hearing can be had before the court.

### CHAPTER 198.

### OF DIVORCES.

Section 5. The clerks of the supreme court in the several counties, shall make returns to the secretary of the state board of health, on or before the first day of March, in each and every year, for the year ending on the thirty-first day of December preceding, of all the applications for divorce, showing the number, the number granted, and the causes which are given for the application, but without the names of the parties, in accordance with the blanks which shall be furnished them by the secretary of the state board of health.

### SECRETARY'S REPORT

TO THE

## BOARD FOR THE YEAR 1883.



### VITAL STATISTICS.

### COLLECTIONS OF RETURNS.

It has been remarked in more than one previous report of the Secretary of the Board, that the facts in relation to the registration of births, marriages and deaths in the State in the year immediately preceding that in which the report of the Board was made, could not then be given, for the reason that the returns from the towns were not all collected at the time when the major part of the report was in the hands of the printer. It is rare that all the town and city clerks forward the complete returns of the registration of births, marriages and deaths in their towns respectively, before the last day of March in each year, and it then requires many weeks of continuous labor to select, classify and arrange the matter for presenting even the most general results.

It will be seen, therefore, that as the report of the Board is made in the month of May of each year, the vital statistics of the previous year could not be included.

An examination of the Report upon the births, marriages and deaths in Rhode Island, in 1882, which may be found in the preceding pages, will show that a larger scope than usual has been given to the consideration of the vital events which are presented, by extending the analysis and comparison of the various facts connected with the different events. The value of the statistics are thus far enhanced, but the field of consideration has been far from fully occupied, and must be until more time can be given than has been heretofore possible.

It has been found that constant vigilance is required in order to secure on the part of many town clerks, that attention to the duties of their office which is required in the effort to obtain full returns of all the births, marriages and deaths in their respective towns, and with them all the necessary facts connected therewith.

A circular has been sent every year, to a large proportion of the town clerks, calling their attention to their duties in respect to the collection of the returns, and necessity therefor.

These circulars have varied somewhat from year to year, and have heretofore found a place in the reports of the Board. The following is substantially the same as that sent during the month of December, 1883:

### CIRCULAR V.

Office of State Registrar,
Providence, December, 1883.

To the Town Clerk of the Town of-

DEAR SIR: The State Registrar desires to call your attention again to the great need of securing perfectly reliable returns of the births, marriages and deaths, that have occurred in your town during the year just now closing. Upon you rests largely the responsibility of securing such desirable results. It has been and is known, that some of the births and deaths which have occurred in the State, during past years, are not found recorded in the town records of the towns in which they occurred.

Among other causes of such failure, the most prominent is the removal of the families in which such births and deaths occur, out of the town in which they occurred, before the collector of returns of births and deaths canvasses the town for them. This defect in regard to birth can be greatly remedied by a careful inquiry on the part of every collector of returns in regard to every child of one year old and less, found, and to be found, in the town which he is canvassing. When the collector finds a child whose birth occurred in some other town than the one he is canvassing, he should make the same inquiries as in other cases, and record on same blank returns; the said returns to be put in the hands of the town clerk as in other cases, and recorded by him in the town record, the same as of those whose births which occurred in the town, with the exception of stating the town where the birth occurred, and the State, if occurring in another State.

The State Registrar will attend to the separation of those born in the town where the canvass is made from those born in other towns.

After the town clerk has copied the town record of births on the large registration returns, and forwarded the same to the Secretary of the State Board of Health, or State Registrar, he should then send the *collector's* small returns of births that have occurred in other towns, to the town clerks of the towns where the births occurred.

The idea is, that the losses and gains in number in the different towns will thereby be best equalized, and the whole number of births in the State more fully ascertained.

The same idea will hold good, not only as between towns, but also as between States. The children born in other States during the year preceding the canvass and found in this State at the time of the canvass, will be about the same in number as of those born in this State and removed to another State before the canvass is made.

All children then, found in any town, whose birth occurred during the preceding year, will be enrolled in the town record of births of the town where residing at the time the canvass is made in January, and be forwarded to the State Registrar the same as those born in the town.

The collector should always be instructed to obtain returns of all deaths, which may come to his knowledge, whether previously reported to the town clerk or not, and if he obtains information and makes returns of deaths that occurred in other towns, and in families removed to and residing in the town which he is canvassing, at the time the returns are collected, the said returns should be recorded in the town where collected, and then transmitted to the town in which the death occurred, as in the case of births. The fees will be the same as in the ordinary returns.

Physician's certificate of cause of death should always be obtained when possible.

The necessity of exercising great diligence in obtaining correct information in regard to the vital statistics of the towns, should be strongly impressed on the minds of canvassers.

The registration returns of births, marriages and deaths which occurred in the several towns of the State, during the past year, and returnable to this office, should have the returns of each class by itself, as heretofore, that is, the births, marriages and deaths on separate blanks, and the sheets *stitched*, or otherwise fastened together in regular order as they come in the quire, and the name of the class, whether births, marriages or deaths, and name of the town from which they are sent, should be written on the first outside page.

Yours respectfully,

CHAS. H. FISHER,

State Registrar.

Appeals have been made to physicians as in previous years, in relation to returns of death, and earnestly desired to forward to the State Registrar returns of deaths occurring in their practice, when their certificate has not been called for within ten days after death, by the undertaker or some other person for the purpose of reporting to the town clerk. The following blank, printed on a postal card, and directed to the Secretary of the State Board of Health, has been furnished to physicians for that purpose.

### RETURN OF A DEATH.

In	the Town of
1.	Name?
2.	Date of Death?
3.	Disease? Primary?
4.	"Secondary?
5.	Immediate Cause of Death?
6.	Sanitary Surroundings: Good?Bad?Average?
7.	Duration of Disease? PrimarySecondary

N. B.—At No. 2, probable age, if not known exactly. At No. 5, state whether from exhaustion, paralysis, hemorrhage, suffocation or what. At No. 6, state yes or no to the questions. For out doors make sign, + over reply. For out and in both make sign, =

The postal returns of deaths which have been received from physicians in the several towns during any year, are kept on file until the annual returns of the same events during the same year have been received from the town clerks, which is usually during March of the following year, and the two are then compared. If there are any deaths reported by physicians on postal returns not found in the returns of the town clerks for the same towns, the facts are noted, and information given the town clerks of the towns from which the defective returns were received. It should be said, however, that such occurrences are few in number.

It has also seemed advisable to appeal to the town councils of some of the towns, from time to time, in the furtherance of complete returns of the births and deaths in their respective towns.

The Town Councils and Courts of Probate of the several towns, are the legal custodians of the rights and immunities of *all* the residents of those towns.

As honest and impartial custodians and conservators of the rights and privileges of *every* resident, no reasonable effort should be neglected by these officials to secure to each and every one all the rights and expectations which the law provides.

The law does provide, and the citizens of the State do expect, that a faithful and true record of every birth, marriage and death, in their own and other families, will be entered in a lawful manner in the record books of vital registration in every town.

The Statutes prescribe the methods, and to the town and city councils and town clerks is assigned the duty of carrying the provisions into effect.

Town councils have been appealed to because it seems evident that there are some towns in the State where proper care is *not taken* to secure complete, and, therefore, reliable returns of the events in question.

The evidence appertains principally to the events of death.

Taking a period of ten years, past, there is one town which has reported an average annual death rate of about eleven in each thousand of the population, while the towns immediately adjoining, and others nearest in distance, report a death rate from above fourteen to over seventeen in each thousand. The town that reports the small death rate has a considerably larger and more compact population than those reporting a larger death rate, and the sanitary conditions of the town are, at the best, no better than in the other towns.

There are other towns which show too small an average annual death rate for a series of years, to confirm full confidence in the completeness of the returns.

It may be taken as a rule, that any town having a compact population, in the whole, or in sections by villages, reporting an average death rate of less than thirteen in each thousand of the population, during a period of several years, fails to return a full report.

Another evidence of non-compliance with the law is found in the return of death with the statement that the cause of death is not known.

The reason why the cause of death is sometimes not given, is because the returns of death are not made to the town clerk before the burial or removal of the deceased person, according to law (see Public Statutes, Chapter 85, Section 8), but sometime afterwards, most frequently in the country towns during January of the following year, when some member of the family states what he or she can remember of the circumstances, and as only known facts are taken, and the exact cause of death is indistinct in the recollection, and there is no physician's certificate, the cause of death is reported "unknown."

Where the law is *properly enforced* the returns with cause of death unknown are quite infrequent.

While the State Registrar is earnestly desirous of having the State of Rhode Island the leading State in the Union, in regard to the completeness of its vital statistics in relation to their legal aspects, he is also equally anxious, as Secretary of the State Board of Health,

to have the statistics complete for the purpose of study in their sanitary aspect.

The lack of as full statement as possible of the causes of death, are not only stumbling blocks in the way of sanitary study, but the defects are sources of regret and mortification to the Registrar, when incorporated and presented to the public in the annual reports.

In order to accomplish the purpose of ascertaining the exact number, and the facts appertaining to every birth, marriage and death occurring in any town, it is quite important that the town clerks of the several towns should be responsible for the faithful performance of the work.

If then the town council of any town, at the first meeting in January, takes away the responsibility from the town clerk and appoints another person as allowed by law, (see Public Statutes, Chapter 85, Section 10) it is quite necessary that the appointment should be made with great care and discretion.

The necessity of appointing only such persons as were well known to be intelligent and discrete, accurate in their methods and conscientious in the performance of their duties, has been often urged.

Councils have also been urged, that in case the duty of canvassing the town in January for births and deaths be intrusted to the canvasser for the school census, it would be far better to make the compensation for collecting vital statistics so much *per capita*, than to let out the work to the lowest bidder for the lowest compensation in gross.

It will serve to lesson the temptation to neglect, in a house to house visitation, some households not convenient to reach, in sparsely settled neighborhoods.

But the Registrar has always held that to secure complete collection of the events of death, in any town or city, it is *absolutely* necessary that the returns of death be made by the person having charge of the funeral, whether "undertaker or *other person*," to the town clerk or substitute BEFORE THE BURIAL, or removal of the deceased body out of the town where the death occurred.

It is for the town and city councils, to pass and *enforce* such municipal ordinances, as will fully secure compliance with the Public Statutes in regard to the correct and complete returns of deaths.

To do this, will need a town ordinance, requiring permission of the town or city clerk, or such persons as the town council may designate or appoint, who shall give the undertaker or person having charge of the funeral, when the return of the death and cause of death has

been presented, a permit certificate, filled out by the town clerk or appointee, giving permission for the burial or removal of the deceased. (Blank Permit certificates will be furnished by the State Registrar when applied for.)

The following is the draft of an ordinance which has been furnished several towns in the State, and which has been adopted by the councils of those towns.

### TOWN ORDINANCE.

It is ordained by the town council of the town of as follows:

"Sec. 1. Whenever any death shall occur in the town of it shall be the duty of the undertaker, or the person who has charge of the burial or removal of the body of the decedent, to obtain, BEFORE BURIAL OR REMOVAL of same, the physician's certificate (if a physician was in attendance) of the name, date and cause of death; and said physician shall exercise due courtesy and diligence in furnishing said certificate; and if no physician was in attendance, or could be reached only with difficulty, then to obtain from such sources as shall seem most reliable, the cause of death, and with the same all the facts required by law in the Public Statutes, (Chapter 85, Section 3), as shown in the blank returns of death, and make or present the said returns to the town clerk of the said town."

"Sec. 2. It shall be the duty of the town clerk, upon the presentation of a return of death in accordance with law, and to his satisfaction, to issue to said undertaker or other person a permit or certificate of permission to bury, entomb, or remove the body of said deceased person without the limits of the town."

"Sec. 3. Any person engaged or concerned in the burial, entombment or removal from the town of the body of a deceased person without a permit, or knowingly violating any of the provisions of the preceding section, shall be fined not less than five dollars, nor more than twenty dollars."

SEC. 4. This ordinance shall go into effect on the first day of 188.

It will be observed, that a minimum fine of five dollars is provided in Section 3, for *knowingly* violating the ordinance. This was designedly introduced because it has been very well settled that any State or municipal law for misdemeanors, is likely to remain largely a dead letter, when no specific minimum penalty is provided. Of course the word "knowingly" will exonerate the innocent.

The State Registrar will furnish all blanks necessary to carry out the provisions of an ordinance like the above, and will also furnish hand bills for posting in public places a notice of the enactment of the above ordinance.

In large towns where the town clerk's office is a long distance from some sections of the town, members of the town council, or the trustees or clerks of school districts might be appointed to act in the place of the town clerk, having blank permits signed by the town clerk, on hand, and the returns to be transmitted by them to the town clerk.

It will be seen that the ordinance drafted above, is entirely in consonance with Statute law, and is needed to secure better compliance with the law, and consequently more complete returns of all the facts connected with the occurrence of every death.

Wherever the above ordinance, or one similar in spirit, has been adopted and enforced in any town, the results have been exceedingly satisfactory in the increased, or full completeness of the returns.

### MARRIAGE.

A synopsis of the laws of Rhode Island in relation to marriage may be found on page 182. This synopsis was drawn up for distribution among the clergymen of the State, among whom there were many who failed to comprehend the Public Statutes in respect to their duties, or did not have access to the Statutes, and among whom there were also many more who were forgetful of some of their duties and needed to be occasionally reminded of them.

This is not saying, however, that any clergyman has designedly or wilfully neglected any known duty, and it is believed that with scarcely more than three or four exceptions, the whole body of the clergy within the State, have conscientiously endeavored to comply with all the requirements of the law, although there were instances, as stated above, where failures occurred from probable inadvertence.

Another circular in relation to the marriage laws, has been also distributed among clergymen in some cases, but was prepared more particularly for town clerks as suggestive of duties appertaining to them. This circular reads as follows:

OFFICE OF STATE REGISTRAR OF VITAL STATISTICS.

### CIRCULAR NO. 24.

Dear Sir:

Recent changes made in the marriage laws of Rhode Island by amendment of Chapter 163, of the Public Statutes, call for a revision of Circular K, issued in June, 1881.

The following rules will have reference to the duties of clergymen and town or city clerks, or city registrar, and are in conformity with the present status of the marriage law:

- 1. Persons may marry within the degrees of consanguinity heretofore allowed by law.
- 2. The marriage of idiots, lunatics and of persons having a husband or wife living, is unlawful and absolutely void.
  - 3. There is no legal bar to the intermarriage of whites and persons of color.
- 4. Any ordained minister or elder of any religious denomination, or minister of any society professing to meet for religious purposes and incorporated and sustaining a minister publicly ordained, who shall be *domiciled* in this State, and either Justice of the Supreme Court, may join persons in marriage in any town in the State; also wardens in the town of New Shoreham. It will be seen that clergymen from other States cannot solemnize marriages in Rhode Island.
- 5. No minister, elder, magistrate or warden shall join persons in marriage, unless such persons, if residents of this State, shall first present a certificate properly executed and signed by the town or city clerk or city registrar of the town or city in which each of such persons shall respectively reside, and if not residents of this State, then from the town or city clerk or registrar of the town or city in which the marriage shall be solemnized, to the effect that the said town or city clerk or registrar, has duly recorded the intention of marriage between the parties named in the certificate, according to law; and the certificate may also bear the signatures of the Groom and Bride and witness thereto.
- 6. No marriage shall be solemnized if lawful objection is made thereto, until such lawful objection is removed.
- 7. The solemulation of marriage shall be in the presence of two witnesses at least, besides the minister or other person officiating, whose signatures shall be appended to the certificate of marriage.
- 8. Marriages solemnized in accordance with the forms, rites and ceremonies of the various religious denominations respectively, are valid if otherwise in accordance with law.
- 9. Every person authorized to join persons in marriage shall certify the time when and the place where the marriage shall have been solemnized, and shall on or before the second Monday of every month, RETURN the CERTIFICATE of every marriage solemnized by him during the last preceding month, to the town or city clerk or registrar of the town or city in which such rite shall have been performed.
- 10. Upon application, the town or city clerk or city registrar of the town or city in which each or both of the persons intending marriage shall reside, shall fill out a blank return of marriage in the form provided by the Secretary of the State Board of Health, and shall certify on the reversed side, in the blank provided, that the intention of marriage between the parties named as groom and bride has been duly recorded in his office.
- 11. No town or city clerk or city registrar shall issue any such certificate to any minor, or person under control of a parent or guardian, unless the consent in writing of the parent or guardian of such person shall have been first obtained thereto, provided, however, such certificate may be issued to a female over eighteen years of age, who has no parent or guardian living in the United States. The legal minority of both sexes terminates at the age of twenty-one.
- 12. The town or city clerk or city registrar, shall, after stating the No. of marriage, whether 1st, 2d, or 3d, etc., at No. 14, on the certificate and return of

marriage filled out by him, also state at No. 15, whether either the groom or bride or both has or have been divorced, by writing the word yes after whichever party has been divorced.

13. The town or city clerk or city registrar shall obtain the facts in relation to divorce, and to minority, and shall have power of administering an oath relative thereto, and may require the signatures of the groom and bride, one or both at his discretion, at the bottom of the return, which he will fill out and certify to. And any person who shall wilfully give any false information for the purpose of obtaining the certificate hereinbefore described, shall be fined not exceeding twenty dollars. But if the signatures of the groom and bride are not required by him, they must be required previous to marriage by the person performing the ceremony.

### Respectfully,

CHAS. H. FISHER,

State Registrar and Sec. of the State Board of Health.

The form of the blank marriage Certificate and Return, to be filled out by the town or city clerk or city registrar before the intentions of the groom and bride expectant are recorded, has been changed somewhat, and now reads as presented on the following page:

### Certificate of Town or City Clerk — AND —

### RETURN OF A MARRIAGE.

### STATE OF RHODE ISLAND.

	(Expectant.)		
1.	Full name of Groom?		
2.	Place of Residence?	•••••	
3.	Age in years?	• • • • • • • • • • • • • • • • • • • •	
4.	Occupation?	, , , , , , , , , , , , , , , , , , ,	
5.	Place of Birth?		
6.	Father's Name?		
7.	Mother's Maiden Name?		
	Parents' Birth-place? Fa	Мо	
	Parents' Occupation? Fa	Мо	
0	(Expectant.)		
8.	Full name of Bride?		
(Mai	aiden name if a widow?)		
9.	Place of Residence?		
10.	Age in years?		
11.	Place of Birth?		
12.	Father's Name?		
13.	Mother's Maiden Name?		
	Parents' Birth-place? Fa		***************************************
	Parents' Occupation? Fa		
14.			
15.	No. of the Marriage?	Groom?	Bride?
16.	Color of the Parties?	Groom?	Bride?
N. B. At No. 14, state whether this marriage is the 1st, 2d, 3d, &c., marriage of each. At No. 16, state whether white, black or mulatto.			
W infor	We, the Parties named in the abo ormation given is correct to the be	ove Certificate and Return h st of our knowledge and belo	ereby certify that the ief.
			(EXPECTANT.)
Sign	ned in the presence of		

N. B.—The above blanks must be filled and the certificate must be signed by both Groom and Bride expectant, and must be given to the person about to solemnize the marriage before the marriage ceremony is performed, Otherwise the Marriage is Unlawfull. After marriage a line of ink should be drawn through each of the words "Expectant," in the above return.

200	STA	TE BOAR	D OF	HEAL	ŤH.			[1883.
0	FFICE OF	TOWN C	LERI	K				R. I.
			• • • • •					.188
No			c .		1	. 41 1		
1 hereby ce	ertify that the			arriage	betwee	n the	nereir	i described
s duly recorded	d in this offic		and.	• • • • • •		• • • • •		• • • • • • • • •
is duly recorded				•••••			To	on Clerk.
riage.  The laws of Rhode Island require at least two witnesses to be present at a marriage, in addition to the parties and the clergyman officiating. Give the names of two who were present. See foot note on the opposite page.	N. B.—The Clergyman or other person solemnizing the marriage is required to sign this certificate, and return it to the Clerk or Registrar of the rown on CITY IN WHICH THE MAR-	Witnesses to the Marriage:	$Attest: \dots	of Khode Island, in the Town of	were joined in marriage by me, in accordance with the laws of the State	and	I hereby Certify, That the herein described	CERTIFICATE OF MARRIAGE.

### REPORTS OF MOST PREVALENT ACUTE DISEASES.

The monthly returns of practicing physicians, the regular correspondents of the Board, of the most prevalent acute diseases occurring in their respective localities during the preceding month, were continued through the year 1883, and by the same methods employed in the four preceding years.

It is doubtless irksome to many, if not all the medical correspondents of the Board, to feel in some measure a professional obligation to make the monthly reports desired by the Secretary of the Board, and that too, frequently at the sacrifice of personal convenience, and therefore great credit is felt to be due to those who have so generously continued to make the reports promptly, and with such fullness as the varying circumstances would allow.

The reasons for desiring the monthly reports of prevailing diseases, in the different localities of the State, the objects to be accomplished and methods of accomplishment, have been given at considerable length in previous Reports of the Board, to which the reader may be referred for more extended remarks.

The returns have been made by postal cards, printed on the back in blank in such form as to give the medical correspondent the least possible trouble and inconvenience in filling them out, and at the same time make the report most complete while most concise in statement.

The following will show the form of the blank as printed on the back of the postal card;

Return of Diseases in				
and viei	nity, during the mo	onth of		.188
next will y an with with		Order of prevalence.	Form or Type.	General Sickness.
In the column order of t number, figure 2 next severity or type, s will kness, a will signify an er cent, increase; with t end of each mouth.	Bronehitis			
Any disease prevalent, not on the list may be added in writing. In the column orde revalence the figure I will sightly the disease affecting the largest number, figure z virgest, and so on, fig 0, that no cases are known. In column of severity or type, a guify severe, a, average, and w, mild. In column of general sickness, a will signify severe, and such a standard sickness, a will signify age with other years; figures with sign 4 attached so much per cent, increase; agn —, so much decrease. Please add name or initials, and send at end of each month.	Catarrhal Influenza			
eer, y or z w in eac	Cerebritis			
the numb erit ss, e cent	Cholera Infantum			-
In st my sev sev skne per it en	Cholera Morbus			
ng. n of sice sice sice sice sice sice sice sice	Croup Membranous			
ritin te la umr teral mu d se	Croup Spasmodie			
g the col	Diphtheria			
ed i ctin In In of ched	Diarrhea			
adda affe wn.	Dysentery			
y be	Fever Typhoid			
may dise are Ir sign nan	Fever Malarial			
list the ses nild, ith	Meningitis Cerebral			
the nify can may no no nify may no no nify es was asse	Measles			
sign t nc t nc md a ligur	Pharyngitis			
will will that that ge,	Pneumonia			
nlen e 1 ig 0, vera year crea	Pleurisy			
igun jan, t a, a, ber b de	Rheumatism			
so so rre, b ot	Scarlet Fever			
Any disease prevalent, not on the list may be added in writing- evalence the figure 1 will signify the disease affecting the larger extra and so on, it's 0, that no cases are known. In column of gnify severe, a, average, and w, mild. In column of general sic erage with other years; figures with sign + attached so much 1; gr—, so much decrease. Please add name or initials, and send a				
ny calendary				
Ar rev rge gni gn		1		

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In the following pages will be found summaries of the monthly reports made during the year 1883;

Summary of Reports of the acute diseases most prevalent in the different towns during

## ANUARY, 1883.

Cholera Morbus.	Est. Far. 13an.
Malarial Fever.	66. 63. 99m.
Typhoid Fever.	88 69 m. h. j.
Searlatina.	9m. 10m. 11.
Rhenmatism.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Measles.	9m., 9m., 10a.
Hooping Cough.	68 . 89
Dysentery and Diarrhea.	8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Diphtheria.	# # # # # # # # # # # # # # # # # # #
.quor')	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Lungs.	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Bronchiæ.	
ТысыТ.	# # # # # # # # # # # # # # # # # # #
Zasal Passages.	चह्रमध्यम् स्थाप्त स्थाप्त स्थाप्त स्थाप्त स्थाप्त स्थाप्त स्थाप्त स्थापत स्यापत स्थापत स्यापत स्थापत स्थाप
Brain.	88 89 111 a
Acute Diseases to	
TOWNS.	Barrington Britington Briting Briting Coventry Coventry Middletown Middletown Middletown Middletown Combordan Counberlan Burrillville East frowidence Counberlan Burrillville East frowidence Morth Providence Morth Smithfield Foster Goester

Summary of Reports of the acute diseases most prevalent in the different towns during

## EBRUARY, 1883.

Malarial Fever,	69 89 69 69 69 69 69 69 69 69 69 69 69 69 69
Cholera Morbus.	88 89 89 89 89 89 89 89 89 89 89 89 89 8
Typhoid Fever.	25 69 99 B
Scarlatina.	8 3 II III III 8 8 8 8 8 8 8 8 8 8 8 8 8
Rheumatism.	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Measles.	88 89 mm 1.5. 99 mm 1.5. 1.5. 1.5. 1.5. 1.5. 1.5. 1.5. 1
Dysentery and Diarrbæa,	######################################
Diphtheria.	3 m
Cronp.	## : # : # : # : # : # : # : # : # : #
Lungs.	- 4 4 4 8 4 4 8 5 4 8 5 5 8 5 5 8 5 5 5 5
Bronchiæ,	बह्यथ्यः
Throat.	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Nasal Passages.	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Brain.	1 1 1 2 2
Acate Diseases to	
TOWNS.	Barrington Warren Brisol Goventy East Greenwich East Gompton Midletown Portsanouth Tiverion Tiverion Tiverion Totanouth Tiverion

## Summary of Reports of acute diseases most prevalent in the different towns during

## MARCH, 1883.

Malarial Fever.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Cholera Merbus.	
Typhoid Fever.	\$ \$ \$ \$ \$ \$ \$ \$ \$
Scarlatina.	## ## ## ## ## ## ## ## ## ## ## ## ##
Rheumatism.	######################################
Measles.	99:
Dysentery and Distribus.	######################################
Diphtheria.	
Croup.	i
Lungs.	\$\$\$\$\$\$\$\$\$\$\$\$\$\$
Bronchiæ.	वं दें हैं है है ते हैं में हैं में में में में में में हैं है हैं है है है है है है है है
Тъози.	######################################
Vasal Passages.	======================================
Brain.	
Acute Diseases of	
TOWNS.	Warren Bristol Coventry Baris Greenwich Mark Greenwich Middelewar Midgelewar Morth Raintheld. Midgelewar Midgel

Summary of Reports of acute diseases most prevalent in the different towns during

APRIL, 1883.

Malarial Fever.	93 93 93 93 93 93 93 93 93 93 93 93 93 9
Cholera Morbus,	
Typhoid Fever.	2m. 2m. 7a. 6m. 6m. 5a.
Scarlatina.	9
Rheumatism.	94 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Mumps.	39.
Measles.	3a
Erysipelas.	-7. 5. 5. 8.
Dysentery and Diarrhea.	9a
Diphtheria.	99 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Croup.	88
Pungs.	28.88.88.88.88.88.88.88.88.88.88.88.88.8
Втопері: 6.	######################################
Throat.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Nasal Passages.	# # # # # # # # # # # # # # # # # # #
Brain.	Ta. 10a.
Acute Diseases to	
. TOWNS.	Warren Bristol East Greenwich Karwick Tivarion Curatson Cumberland East Providence Johnston Burrillyille Gocoster Lincoln Woonsocket

# Summary of Reports of acute diseases most prevalent in the different towns during

### MAY, 1883.

Malarial Fever.	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Cholera Morbus.	# # # # # # # # # # # # # # # # # # #
Typhoid Fever.	
Scarlatina.	10m. 10m.
Rheumatism.	8
Measles.	i i i i i i i i i i i i i i i i i i i
Hooping Congh.	Tin. 1a. 288.
Дувепету апд Діаттрав.	7a
Diphtheria.	6 m.
Croup.	6a
Lunge.	18. 18. 22. 22. 23. 23. 33. 33. 33. 33. 33. 33
Bronchiæ,	a sa
лвотиТ.	\$ # # # # # # # # # # # # # # # # # # #
Zasal Passages.	8-4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2
Brain.	7a
Acute Diseases to	
TOWNS.	Barrington. Warren Barrington. Coventry Bat Greenwich Bat Greenwich Bat Greenwich Carritic Compton Brivetton Brivetton Cranston. Cranston. Cranston. Cranston. Ontri Providence Activate Regiver. Providence City Courbenton. North Providence City Courbenton. North Kingstown Hobbinton. North Kingstown Richmond

Summary of Reports of acute diseases most prevalent in the different towns during

## JUNE, 1883.

Malarial Fever.	100
Cholera Infantum.	28. 68. 68. 68. 29. 29. 29. 29. 5m.
Cholera Morbus.	7.28
Typhoid Fever.	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Scarlatina.	9m. 11m.
Rheumstism,	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Measles.	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Hooping Cough.	m
Dysentery and Distribes.	28.88.88.1
Diphtheria.	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Lungs.	99
Bronchiæ.	
Throat.	######################################
Vasal Passages.	### ##################################
Brain.	44. 44. 44. 44. 44. 44. 44. 44. 44. 44.
sesses Directly Acres of Page 1995	
TOWNS.	Warren Bristol Gost Green Gost Green Warwick Tiverion Burri Ivilie Cranscon Cumberland Gunderland Gunderland Johnston Johnston Paytucket Johnston Paytucket Scitaate Providence City Providence City Charlestown Hopkinton Morth Kingstown Richmond Westerly

## Summary of Reports of acute diseases most prevalent in the different towns during

### ULY, 1883.

Malarial Fever.	## ## ## ### ### ### ### ### ### ### #
Cholera Infantum.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Cholera Morbus.	######################################
Typhoid Fever.	78. Han 14 Han 188. Se. Han 189. Se. Han 189
Scarlatina.	9m.
Rheumatism	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Measles.	3 m 4 m
Hooping Congh.	## 28 H
Dysentery and Distribea.	# # # # # # # # # # # # # # # # # # #
Diphtheria.	
Lungs.	\$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ .
Bronchiæ.	6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
ТргозС	9 m
Zasal Passages.	g: g: g:
Brain.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Acute Diseases to	
,	
TOWNS.	Barrington Warren Barrington Barrington Barrington Barrington Barrington Marwick Jamescown Addiecompton Middlecompton More Shoreham Forenom New Shoreham Forenom More Shoreham Camberlan Granston Gransto

Summary of Reports of acute diseases most prevalent in the different towns during

## UGUST, 1883.

Malarial Fever.	100 m.
Cholera Infantum.	# # # # # # # # # # # # # # # # # # #
Cholera Morbus.	8
Typhoid Fever.	55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Scarlatina	93. 93. 4-m.
Rheumatism.	7 5 m. 4 m. 5 m. 1
Measles.	7.3
Hooping Congh.	4a.
Dysentery and Diarrhæa.	######################################
Diphtheria.	88 88 88 88 88 88 88 88 88 88 88 88 88
Lungs.	a the first that the
Bronchiæ.	88 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Тргоят.	88m. 52m. 52m. 6a. 6a. 6a. 6a. 6a. 6a. 6a. 6a. 6a. 6a
Nasal Passages.	8 Sn. 4 4m.
Brain.	89 89 89 89 89 89 89 89 89 89 89 89 89 8
Acnte Diseases to	
TOWNS.	Bristol  Coventry  Bast Greenwich  Bast Greenwich  Jamestown  Middletown  New Shoredam  Portsnoth  Portsnoth  Burrilvitle  Granston  Cumberlan  Comberlan  Johnston  North Providence  Glocster  Johnston  North Smithfield  Partnecket  Seftnate  Somether  Johnston  North Smithfield  Partnecket  Somether  Johnston  North Smithfield  Partnecket  Softnate  Charlestown  Hopkinton  North Mingstown  Hopkinton  North Kingstown  Hopkinton  North Kingstown  Hopkinton  North Kingstown  Hopkinton  North Kingstown  Refehnond

Summary of Reports of the acute diseases most prevalent in the different towns during

# SEPTEMBER, 1883.

Malarial Fever.	4 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Cholera Infantum.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Cholera Morbus.	98. 12 m. 13
Typhoid Fever.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Scarlatina.	5 5 m. 9 m. 4 5 m. 6 m. 4 5 m. 6 m. 7
Rheumatism,	2 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Measles.	6 6m
Dysentery and Distrhæa.	¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥¥
Diphtheria.	6 6m. 3 3m 1 2a. 1 1a.
Croup.	7a 6m 9a 1a 3m 14a 14a 11a
Lungs.	73a. 4m. 73a. 3a. 4m. 9a. 9a. 9a.
Bronchiæ.	8 8 8 8 8 1 4 2 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Throat.	2 3 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Nasal Passages.	55m, 44m, 55m, 88m, 11a, 11a, 11a, 11a, 11a, 11a, 11a, 11
Brain.	98. 88. 89. 99. 99. 99. 99. 99. 99. 99.
Acute Diseases 10	
TOWNS.	Barrington.  Warren Bristol  Borstol  Borstol  Borstol  Barst Greenwich  Warwick  Little Compton  Middelown  Middelown  Portsmouth  Portsmoth  Portsmoth  Burrillville  Camston  Camston  Camston  Camston  Cumberland  Barst I providence  Gunberland  Barst I providence  Gunberland  Barst I providence  Gunberland  Barst I providence  Gloecser  Johnston  North Smithfield  Pavtnoker  Sciluate  Sciluate  Moonsoked  Moonso

Summary of Reports of acute diseases most prevalent in the different towns during

## OCTOBER, 1883.

Malarial Fever.	68 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Cholera Infantum.	7a
Cholera Morbus.	æ
Typhoid Fever.	28. 28. 28. 28. 28. 28. 28. 28. 28. 28.
Scarlatina.	7m. 7m. 5a. 5a. 5a. 5a. 5a. 5a. 5a. 5a. 5a. 5a
Rheumatism.	98 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
Measles.	2 m
Hooping Cough.	10m. 13m. 44a.
Erysipelas.	448.
Dysentery and Diarrhæa,	113. 114. 114. 114. 116.
Diphtheria.	68 88 9m.
Croup.	fin.
Lungs.	44 44 49 49 49 49 49 49 49 49 49 49 49 4
Bronchiæ,	888 888 888 888 888 888 888 888 888 88
Throat.	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Vasal Passages.	66: 8 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
. Brain.	7a. 10m. 10a. 13a.
Acnte Diseases to	
TOWNS.	Warren Bristol. Goventry East Greenwich Warwick Little Compton New Shorelum New Shorelum New Shorelum New Shorelum New Sonelum Now Sonelum Now Sonelum Now Sonelum Santharia (Line) Lincoln Nowth Smithfield Pavitueket Providence City Providence City Wonsocket Wonsocket Month Smithfield North Kingstown North Kingstown

Summary of Reports of the acute diseases most prevalent in the different towns during

## NOVEMBER, 1883.

Malarial Fever.	288. 288. 11a. 11a. 15a. 15a. 15a. 16a. 16a. 16a. 16a. 16a. 16a. 16a. 16
Cholera Morbus.	10a 6a
Typhoid Fever.	24. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25
Scarlatina.	
Rhenmatism.	88 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Measles.	8m
Hooping Cough.	8 9 n
Dysentery and Diarrhea.	
Diphtheria.	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Croup.	88
Lunge.	38. 38. 38. 39. 39. 39. 44. 39. 39. 39. 39. 39. 39. 39. 39. 39. 39
Bronchiæ.	######################################
Throat.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Vasal Passages.	######################################
.niera	: :: :: :: :: :: :: :: :: :: :: :: :: :
seases Diabases for the state of the state o	
TOWNS.	Warren  Warren  Bast Greenwich  Bast Greenwich  Warwick  Little Compton  Niveron  Burrillville  Cramston  Providence  Soitan  Soitan  Providence City  Conthicute  Providence City  Classice  Releanond  Wosth Kingetown  North Kingetown  North Kingetown  North Kingetown  Westerly

Summary of Reports of acute diseases most prevalent in the different towns during

## DECEMBER, 1883.

11	· . : :::: :: :,,,,.::::
Malarial Fever,	8 8a. 8a. 1a. 1a. 1a. 1a. 1a. 1a. 1a. 1a. 1a. 1
Cholera Morbus.	
Typhoid Fever.	68
Scarlatina.	88.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8
Rheumatism.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Measles.	9a.
Erysipelas.	4.00 8. g
Dysentery and Distrhæs.	33 4 4 m.
Diphtheria.	5 m
Croup.	3a. 11a. 5m. 5m. 6a. 6a.
rsZan7	62. 25. 25. 25. 25. 25. 25. 25. 25. 25. 2
Bronchiæ,	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
.двотиТ	24. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25
Nasal Passages.	88 : 8888888
Brain.	98m. 99 99 99 99 99 99 99 99 99 99 99 99 99
Acute Diseases to	
TOWNS.	Warren Bristol Coventry East Greenwich Warwick New Shoreham Burrillville Cumberland Gloester Joinston Lincoln Providence Gity Christon Nonch Kingstown Richmond Westenly

## MONTHLY RETURNS.

The plan of soliciting from practicing physicians in all parts of the State, a monthly report of the kinds, form and degree of prevalence of the most important acute diseases, and especially those zymotic diseases which are propagated by contagion or infection, was originally devised for the purpose of studying the occurrence, progress and decline of diseases, in connection with the atmospheric and telluric conditions prevailing at the same time.

The blanks for the monthly reports were originally much more comprehensive and complex than those in later use, and contained headings by which could be stated the kinds of disease; the degree of prevalence of each; the degree of severity; the ratio of mortality; the temperature and relative humidity of the atmosphere; the fluctuations of the same as to frequency and degree of change; character and humidity of soil; height of ground water; and several others, comprising twenty-three headings.

All of the conditions above named have, doubtless, more or less influence in the causation and continuance of many kinds of disease, and also upon the severity of form or type, and mortality therefrom.

In order then to properly investigate the causes of disease, the modes of invasion, the conditions that determine their severity and therefore their degrees of disablement or fatality, their modes of propagation (if not by conveyance of infectious germs from one locality to another), it is obvious that a great number of circumstances existing at the same time must be taken into consideration, and that the conditions of air and earth must of necessity be included.

It was, however, found that the average medical correspondent could not, without very considerable inconvenience, give time and attention to the requisite observations and examinations needed, and make complete and explicit monthly record and returns thereof.

The present form of blank, now used four years, was then adopted and has very generally been promptly filled out and returned monthly, and furnishes information of the prevalence of the most important kinds of acute diseases in the different towns of the State. By them, the Secretary and the readers of the Annual Reports, may ascertain after a series of years what towns are most liable to diseases of particular kinds and what towns most exempt; where zymotic, or infectious diseases most largely and most frequently prevail, and where they occur infrequently or to a small extent; what influence season may seem to have upon their occurrence, degree of severity and extent of prevalence; how contagions diseases travel from one locality to another; how they may appear in epidemic form at certain recurring periods in some localities, and irregularly and perhaps never epidemic in other localities: and many other particulars which could be ascertained in no other way.

After a number of facts have been established in relation to the prevalence of particular diseases in certain localities, investigations can then be made with a more definite purpose, by enquiry as to the differing conditions of the different localities in relation to the sanitary surroundings, natural and artificial, ponds, swamps, hills, valleys; soil, sub-soil and other sub-strata; general condition of dwellings and out grounds, occupations, modes of living, social and pecuniary status, habits, indulgences, &c., &c., of the people.

The following Table will show by a summary of the monthly reports for 1883, the varying degrees of prevalence of several prominent zymotic diseases, and also of Bronchitis and Pneumonia, in the diferent localities of the State, during the year:

TOWNS.	Bronchitis.	Pneumonia.	Diphtheria.	Hooping Cough.	Measles.	Scarlatina.	Typhoid Fever.	Cholera Infantum.	Malarial Fever.
Barrington		= '	0	0	0	0	-	_	+
Warren	=	=		_	-	0	_	=	=
Bristol	=	=	- 1	0	-	0	+	- ,	+
Coventry	+	-	=	0	_	- 1	=	=	
East Greenwich	=	=		_	_	_	_	=	_
West Greenwich	+	_	_	0	0	0	-	0	0
Warwick	=	=	=	+	=	0	+	-	_
Jamestown	=	=	0	0	0		_	0	0
Little Compton	1	-	0	0	_	*	_	_	0
Middletown	=	=		0	0		-	-	0
New Shoreham	_	0	0	*	_	_	=	_	0
Tiverton	=	_	0	0	_	0	=	-	0
Newport	=	=	_	0	0		_	==	0
Burrillville	0	0	0	_	=	0	=	0	0
Cranston	+		_	0	_	- 1	_	_	+
Cumberland	=	_	0	_	_	=	=	_	+
East Providence	_	=	0	0	0		=	_	+
Foster	=	_	_	0	0	0	_	_	0
Glocester	=	=	0	0	=	0	_	_	0
Johnston	+	=	+	_	_	_	=	=	+
Lincoln	=	=	_		0		_	_	+
North Providence	+	=	_	0	0		=	_	+
North Smithfield	=	=	_	0	0	0	=	_	=
Pawtucket	=	+	_			_	_	_	+
Scituate	=	=	_	0	0	0	+	=	+
Smithfield	=	+	_	_		0	_	_	_
Woonsocket	=	=	_	0	_		=	_	+
Providence City	=	_	=	_	_	_	=		=
Charlestown	_	+		0	_		_		_
Hopkinton		_	=	_	0		_	_	=
North Kingstown		_		0	0		_	=	
Richmond		_		*			_	_	_
Westerly			_	+	=	=	_	=	+
									1

The signs or characters used in the above Table, indicate the degrees of prevalence of the diseases named, as follows: The \* indicates an epidemic prevalence: the sign + a large prevalence; the sign = a moderate prevalence; the sign — a small prevalence; the dots .... a very small prevalence, and the 0, no prevalence according to the returns.

It will be seen by an examination of the Table on the preceding page, that in 1883, the zymotic diseases of usual occurrence and of largest fatality, had a diminished prevalence, taking the whole State and the entire year.

## CHOLERA INFANTUM.

Reports from towns show, that Cholera Infantum had less than the ordinary prevalence during 1883. It was epidemic in no locality, and largely prevalent in none.

## DIPHTHERIA.

In no town was Diphtheria reported epidemic during the year. In but one town was there more than an average yearly prevalence, in but four towns an equal average, while in fourteen towns the reports showed a lessened prevalence, and in all the remainder, a very few cases, or none at all. Cases generally of mild form.

## HOOPING COUGH.

Hooping Cough was epidemic in two towns, and had unusual prevalence in two. In all other towns a few sporadic cases, or entire absence. Number of fatal cases very small.

## MEASLES.

This disease was unusually infrequent throughout the State during the entire year. Nowhere epidemic.

### SCARLATINA.

Scarlatina was epidemic in one locality, but not largely fatal. With three exceptions only, there was a greatly diminished occurrence of Scarlet Fever in all the towns of the State throughout the year.

## MALARIAL FEVER.

Malarial diseases though not frequently fatal, are of special interest at this time because of their recent advent into Rhode Island. A large prevalence of malarial influence was reported from twelve towns, an equal prevalence with the previous year from four towns, and a diminished prevalence in seven towns. From thirteen towns no indigenous cases were reported.

## METEOROLOGY.

It has been remarked in previous reports, that from the results of meteorological observations, made by the medical correspondents of the Board, in the several towns throughout the State, during the years 1878 and 1879, it was ascertained that the atmospheric conditions in respect to temperature and humidity prevailing in the different towns at the same dates, did not greatly differ, the principal differences being those of humidity occurring during the warm season, and depending largely doubtless upon the difference of visitation by transient showers.

There was, however, seen to have been a more marked difference in the prevailing direction of the wind during each month, between the northern and southern half of the State.

It was seen, also, that the observations made in the towns in the northern part of the State, corresponded very nearly with those made in Providence city; and those made in the southern part of the State, with the observations made in Newport city.

Since 1879, the observations made at the office of the City Engineer of Providence, and until the past year, at the office of the Signal Station of the U. S. A., in Newport city, have been had recourse to as showing with sufficient accuracy the meteorological conditions of the whole State.

Through the kindness of the City Engineer of Providence, and the officers of the Chief Signal Office at Washington, D. C., the following tabulated meteorological observations for the year 1883, were furnished for the present annual report.

It will be noticed that the observations for 1883, furnished by the Chief Signal Officer of the U. S. Army, were made at the Signal Station at Narragansett Pier, R. I., instead of at Newport.

Remarks in regard to the value of meteorological statistics, in connection with mortuary statistics and statistics of prevalent diseases, in the study of the causes of disease, may be found in previous reports of the Secretary, and to a limited extent on page 215 of this report.

## SIGNAL SERVICE STATION, U. S. A., NARRAGANSETT PIER, R. I.

Statement showing the temperatures, the rainfall, in inches and nundredths, and the prevailing direction of the wind, for each month of the year 1883. (Compiled from the records on file at the office of the Chief Signal Officer of the Army.)

	ТЕМРЕН	ATURE.	-i	
Монтн, 1883.	Maximum.	Minimum.	Precipitation, in inches and hun- dredths.	Prevailing Wind.
January	46	1	4.92	N. E.
February	52	11	4.24	N. W.
March	56	5	2.91	N. W.
April	66	23	2.76	s. w.
May	75	36	2.55	s. w.
June	84	50	, 2.03	s. w.
July	87	56	6.09	s. w.
August	85	45	1.13	s w.
September	77	39	1.80	s. w.
October	75	29	8.14	N. E.
November	62	17	5.11	s. w.
December	56	*9	2.75	N. W.

Mean temperature of the year 1883, 48.6. Total amount of rain and melted snow, 44.43 inches.

Station at Newport, R. I., discontinued March 31st, 1883.

But one observation (at the hour of sunset) taken daily at Narragansett Pier, R. I.

<sup>\*</sup> Below zero.

WAR DEPARTMENT, WASHINGTON, D. C., March 25, 1884.

## CITY ENGINEER'S OFFICE, PROVIDENCE, R. I.

Temperature, Rainfall and prevailing direction of the wind, for each month during the year 1883.

				_	-			·	
			TEMI	PERATU	JRE.			ted	Vind.
1883.	Monthly Mean.	Maximum.	Minimum.	Monthly Range.	Greatest Daily Range.	Least Daily Range.	Average Daily Range.	Total amount of Rain or Melted Snow in inches.	Prevailing Direction of the Wind.
January	23.7	46.	1.	45.	36.	5.	15.4	6.68	∫ N. W.
February	27.6	55.	10.	45.	38.	10.	18.9	5.11	( Variable. ) N. W.
March	29.3	56.	7.	49.	39.	9.	18.1	2.89	Variable. N. W.
April	44.4	69.	28.	41.	31.	10.	18.8	2.38	N. W.
May	57.5	80.5	38.	42.5	33,	8.5	19.7	5.21	Variable.
June	71.0	90.	46.	44.	32.	7.	19.6	1.52	S.
July	73.5	93.	57.	36.	35.	9.	19.4	3.83	s. w.
August	69.2	89.	48.5	40.5	28.	10.5	19.3	1.00	Variable.
September	61.4	81.5	40.	41.5	28.	6.5	20.1	3.01	Variable.
October	48.8	75.	27.	48.	31.	4.	17.8	6.30	N.
November	42.6	65.	18.	47.	27.5	11.	18.0	3.12	N. W.
December	29.0	56.5	*-9.5	66.	34.5	6.5	16.2	4.66	N. W.

Mean temperature for the year 1883 was 48.2° Fah. Total amount of rain or melted snow, 45.71 inches.

<sup>\*</sup> Below zero.

Note.—The maximum and minimum thermometers are not read on the Sabbath; therefore the daily ranges were computed, considering the reading from Saturday to Monday as one.

CITY ENGINEER'S OFFICE, PROVIDENCE, R. I.

# SUMMARY OF METEOROLOGICAL OBSERVATIONS,

AT HOPE RESERVOIR AND CITY HALL. FOR THE YEAR 1883.

.X		Humidity Humidity 15 6.8 6.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	
0 0	6	75	
10 es	0 6	75	29.34 1.07 72 29.21 1.44 75

...

December	30.06	30.68	29.17	1.51	30.06 30.68 29.17 1.51 76 7 1 0 2 2 3 3 8 5 2.5 6 7 0 18 0 5.5 4.66 24.00		-	0	64	63	e.b	<del></del>		2.2	===		<u> </u>	18	0	5.5	4.66†	24.00
Means for the year 30.05 1.08	30.05	:		1.08	12	:	:	:	:	:		·		61	:		:	:	:	5.1	:	:
Totals for the year	:		:	:	:	43	31	t-	11	4	43 31 7 11 44 51 35 70 73 45 136 17 156 11	50	0 7	:	4	136	17	156	11	:	45.71	73.00
Extremes	:	30.77 28.88 1.89	28.88	1.89	:	:	:	:	:	:		·-	•	:	<u>:</u>		:	:	:	:	:	:

# Yearly Summary for 1882.

:	74.00	:	
	51.84		
5.3	54 26 2 16 46 39 40 82 60 44 148 31 136 6	:	
:	9	:	
:	136	:	
:	31	:	
:	148	:	
:	77	:	
2.2	:	:	
:	99	:	
:	82	:	
:	40	:	
:	39	:	
:	46	:	
:	16	:	
:	64	:	
:	26	:	
:	54	:	
72	:	:	
1.03	:	1.57	
:	:	.79 29.22 1.57	
:	:	30.79	
30.03	:	:	
Means for the year 30.03	Totals for the year	Extremes	

# Yearly Summary for 1881.

Means for the year	30.00	:	:	0 1.08	-13	:	:	:	:	:	:	-:	•			•	-	:	-:	5.1	5.1	
Totals for the year	:	:	:	:		47	33	47 33 12 9 50 47 20 80 67   80 73 54 130 28	6	20	47	30	0	:	00	0 77	5	13(	- 58	:	52.96	6 27
Extremes	:	30.80	30.80 28.97 1.83	1.83	:		:	:	:	:	:	:		:		•	:	:	:	:	:	:

The force of the wind and amount of cloud are expressed very approximately in figures from 0 to 10.

## ANNUAL REPORTS OF MEDICAL CORRESPONDENTS.

The plan of obtaining from the regular medical correspondents of the Board, and other physicians, as in previous years, of a report at the commencement of each year, covering, in a general way, the whole of the preceding year, in relation to the amount of sickness of all kinds, the prevalence of particular diseases, and sanitary conditions and movements in their respective localities, has been continued and the following circular sent therefor:

## CIRCULAR NO. 18.

## OFFICE OF SECRETARY OF THE STATE BOARD OF HEALTH,

PROVIDENCE, Jan. 1, 1884.

## To Physicians:

The Secretary of the State Board of Health desires to obtain from all respectable physicians in every section of the State, an Annual Report, covering the whole twelve months preceding the above date.

The following questions will indicate the information sought, and the general plan of such report; but correspondents need not be confined to precise replies to the questions presented, all the freedom being allowable of such modifications and additions, as the circumstances or peculiarities of each locality may seem to warrant.

These annual reports are desired for the purpose of presenting the status of the public health and the sanitary conditions existing in the different sections of the State, during the year 1883, in the Sixth Annual Report of the State Board of Health.

They should be returned to the Secretary of the Board by the second week in February.

Any additional postage stamps needed to cover postage on more extended consideration of the topics suggested, or any other topic having relation to the public health, will be immediately refunded on the receipt of papers.

localities?

1. Name of town and circuit.

your circuit during the past year? How much?

## QUESTIONS.

2. Taking sickness of all kinds, has there been more or less than usual in

3. Which of the following zymotic diseases have prevailed in your circuit during the past year? Please state when sporadic and when epidemic, whether mild, average or severe, and in what months they occurred, and in what

a.	Cholera Infantum.
b.	Croup.
c.	Diarrhœa and Dysentery.
d.	Diphtheria.
e.	Fever, Malarial.
f.	Fever, Typhoid.
g.	Measles.
h.	Scarlatina.
i.	Small Pox.
j.	Whooping Cough.
k.	Meningitis, Cerebro-Spinal.
Ar	y other important diseases becoming epidemic.

Also, please state what degree of prevalence, whether large, average or small, and if above average, in what months was the large occurrence, of the following named diseases. State degree of prevalence and time of occurrence under the headings

## Degree of

	F	REVALENCE.	Months.
l.	Brain, Inflammation and Congestion of.		
m.	Bronchitis.		
n.	Erysipelas.		
0.	Pneumonia.		
р.	Rheumatism.		
q.	Stomach, Acute Diseases of.		

5. What diseases, not classed as zymotics, have had unusually large prevalence during the past year?

4. Are there any diseases that regularly appear every year, in any locality in your circuit, that seem to be endemic or peculiar to that locality? If so, what

6. What diseases have been attended with unusual fatality?

diseases and where?

- 7. Have any circumstances occurred within your observation or knowledge, that seemed to indicate that Scarlet Fever, Diphtheria or Typhoid Fever had been taken, or communicated from one person to another? A full history of known facts in detail should be given. Such history need not be confined to any particular year. State on separate sheet.
- 8. Has there been, in your opinion, any advance in public sentiment or of individuals, in your circuit, in regard to the importance of sanitary surroundings; or any increased interest in questions appertaining to means of preventing diseases, and promoting individual and general health? State what reasons for belief.

Very respectfully,

CHAS. H. FISHER,

Sec. State Board of Health.

The following extract from the Public Statutes in relation to the duties of town and local boards of health and practicing physicians, was also appended:

## PUBLIC STATUTES, CHAPTER 83.

SEC. 6. The secretary of the said board shall make inquiry from time to time, of the clerks of town and local boards of health and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health, in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals in their several towns and localities respectively; and the said elerks of town and local boards of health, and the said practicing physicians, shall give such information, in reply to said inquiries, of such facts and circumstances as shall have come to their knowledge.

## IN REPLY TO CIRCULAR No. 13.

The following reports, received from local correspondents of the medical profession in the several cities, towns and villages of the State, will give a good representation of the general status of the public health during the year 1883, as to the presence or absence of epidemics or endemics in the several locations, the sanitary conditions and improvements, if any, in their several circuits, and other suggestions in response to the preceding circular;

## BRISTOL COUNTY.

- 1. WARREN and BARRINGTON.
- 2. Taking sickness of all kinds, there has been about the usual amount in this circuit during the past year.
- 3. The following zymotic diseases have prevailed in this circuit during the past year:

Cholera Infantum. Mild forms of this, in sporadic form during the summer months.

Croup. Very few cases in 1883. Those in February and November.

Diarrhea and Dysentery. Mild, sporadic. Late summer and fall months.

Diphtheria. None.

Malarial Fever. Average with last year-milder form, perhaps; late fall months.

Typhoid Fever. A few cases during year, mild, sporadic, winter months, mostly scattered through first half of the year.

Whooping Cough. A few cases sporadic, mild. Summer.

No other important disease becoming epidemic.

The following diseases have also prevailed to some extent:

Acute Diseases of Brain. Average number of cases, scattered. Winter, spring and fall.

Bronchitis. Average number of cases. Winter, spring and fall.

Erysipelas. A few cases. No determinate months.

Pneumonia. Average, winter and fall.

Rheumatism. Average, through the year.

Acute Diseases of Stomach. Average, mostly in the warm months.

- 4. No diseases that appear every year that seem to be endemic, excepting malaria.
- 5. No diseases, not classed as zymotics, have had unsually large prevalence during the year.
  - 6. No diseases have been attended with unusual fatality.

G. L. CHURCH, M. D.

- 1. Bristol.
- 2. 'The amount of sickness of all kinds has been about the same as last year, with the exception of Typhoid Fever.
- 3. The following zymotic diseases have prevailed during the past year, as stated below:

Cholera Infantum. Less than in the previous year.

Croup. Less.

Diarrhœa and Dysentery. A few cases, mostly prevalent in August and September.

Diphtheria. A few cases; light or mild.

Malarial Fever. Less than last year, but still quite prevalent from July to December.

Typhoid Fever. About twenty-five cases in August and September, and also some in October and November (sporadic).

Measles. A few cases sporadic through the year.

Scarlatina. Only four cases to my knowledge.

Early in the year there were a few cases of Gastric Catarrh, or more commonly called Winter Cholera.

Other diseases as follows:

Bronchitis. Average, prevalent February and March.

Erysipelas. A few cases in different months.

Pneumonia. Average, prevalent January and February.

Rheumatism. Prevailed most largely in December.

Acute Diseases of Stomach. November and December.

- 4. No diseases regularly appear every year that seem to be endemic, except Majarial fevers be so called.
- 5. The principal disease that had unusually large prevalence during the past year was Typhoid Fever.
- 6. No diseases were attended with unusual fatality, except Typhoid Fever and Pneumonia.

T. H. SHIPMAN, M. D.

## KENT COUNTY.

- 1. COVENTRY and parts of WARWICK.
- 2. Of sickness of all kinds in my circuit, during the past year, there was more during the first nine months, and less the last three, than during the same time the previous year.
- 3. The following zymotic diseases have prevailed in my circuit during the past year:

Cholera Infantum. An average amount through the summer months. Not especially fatal.

Croup. Only a few cases of membranous—all fatal.

Diarrhœa and Dysentery. Each have been of frequent occurrence the entire year, but not epidemic or severe in type.

Diphtheria. But little diphtheria.

Typhoid Fever. Some prevalence in the late fall months.

Measles. A few sporadic cases.

The following diseases had the usual prevalence:

Bronchitis. Mild cases nearly every month.

Erysipelas. A very few only.

Pneumonia. In the spring and fall.

Rheumatism. Usually mild, scattered through the year.

Acute Diseases of Stomach. A few mild cases.

- 4. No diseases that regularly appear every year, in any locality, that seem to be endemic or peculiar to that locality.
  - 5. No diseases have had unusually large prevalence during the year.
  - 6. No diseases have been attended with unusual fatality.
- 8. As to any advance in public sentiment or of individuals, in my circuit, in regard to the importance of sanitary surroundings, or increased interest in means of preventing diseases, it may be said that people *talk* about it, but *do nothing*.

J. Winsor, M. D.

- 1. COVENTRY, WEST GREENWICH and WARWICK, in part.
- 2. With me, taking all sickness, there has been about one-tenth more than in the year previous.
- 3. The following zymotic diseases have prevailed in my circuit during the past year:

Cholera Infantum. August, average; quite prevalent, seemed to be sporadic. Occurred mostly on flats and low lands.

Croup. Spasmodic, severe; average prevalence in September and November. Occurred most frequently near rivers or ponds, (frosty places).

Diarrhœa and Dysentery. Severe in July, August and September; average in October. Occurred near ponds, swamps and on high land where wells and cisterns were low. Almost an epidemic.

Diphtheria. Average in August, mild in September, average in October, mild in November and December. Occurred mostly in Washington and Coventry Centre, on the river sides and near ponds.

Malarial Fever. A few cases nearly every month, but all of them were imported cases; mostly severe.

Typhoid Fever. A few cases nearly every month, mild and on average, except October, when very severe and prevalent; in small tenements.

Measles. But few cases, mild and average form.

Scarlatina. Mild in September, November and December, other months a few sporadic cases.

Whooping Cough. A few mild cases during past year.

No important disease epidemic.

Other diseases occurred as follows:

Inflammation and Congestion of Brain. Large, but mild usually. August and September.

Bronchitis. Above the average in August, but mild; severe from August to December.

Erysipelas. Severe and above the average during November and December. Cerebro-Spinal Meningitis. Small number, but severe in October.

Pneumonia. Small prevalence compared with some years.

Rheumatism. Large, and average severity for every month.

Acute Diseases of Stomach. Small number, Gastritis, and acute dyspepsia in summer months.

- 4. No diseases that appear every year in any locality that seem to be endemic.
- 5. Of a disease that has had unusually large prevalence during the past year, may be mentioned Cystitis, especially among the young and middle aged.
  - 6. No diseases have been attended with unusual fatality.
  - 7. Nothing more than in last year's report (annual.)
- 8. In regard to any advance in public sentiment or of individuals in the importance of sanitary surroundings, no public efforts, to my knowledge, have been made, but some few private improvements, by request, have been made.
  - 9

F. B. SMITH, M. D.

- 1. East Greenwich and parts of Warwick and North Kingstown.
- 2. Of the whole of sickness of all kinds, there has been rather less than usual in this circuit during the past year, say 10 per cent. less.
  - 3. The following zymotic diseases have prevailed:

Cholera Infantum. Sporadic, mild.

Diarrhœa and Dysentery. Sporadic, average.

Malarial Fever. A few cases. May to October.

Typhoid Fever. Sporadic cases in each of the fall months.

Measles. In the winter, March and April, average.

Scarlatina. A few cases, mild.

Whooping Cough. A few cases, average.

No epidemic of any disease.

Other diseases:

Bronchitis. In the form of Catarrh and Influenza.

Erysipelas. A few sporadic cases.

Cerebro-Spinal Meningitis. One or two cases in children, attended with convulsions.

Pueumonia. Quite prevalent in spring and winter months, but not to be epidemic.

Rheumatism. Occasional cases.

- 4. No diseases that regularly appear every year that seem to be endemic.
- 5. No disease has had unusually large prevalence during the past year, except, perhaps, Jaundice, in young persons or children.
  - 6. No diseases have been attended with unusual fatality.
- 7. No unusual circumstances have occurred within my observation that seemed to indicate that scarlet fever, diphtheria or typhoid fever had been taken or communicated from one person to another.
- 8. There was some small advance in public sentiment and of individuals in regard to the importance of sanitary surroundings.

J. H. ELDRIDGE, M. D.

- 1. East Greenwich and vicinity.
- 2. There has been about the average amount of sickness during the past year.
- 3. The following zymotic diseases have prevailed during the year:

Cholera Infantum. Average number of cases during summer months.

Croup. Average number of cases of catarrhal croup throughout the year.

Diarrhœa and Dysentery. Average number of cases during summer and

Diphtheria. Few sporadic cases.

Malarial Fever. Few cases, mild.

Typhoid Fever. Average number of cases in surrounding country; but one case in the village of East Greenwich.

Measles. Quite prevalent in January and February, and during spring.

Scarlatina. Sporadic cases scattered throughout the year.

Whooping Cough. Has prevailed considerably during the autumn.

No other important disease epidemic.

Of diseases not strictly zymotic:

Inflammation and Congestion of Brain. Average prevalence; June and July.

Bronchitis. Average prevalence; January, February and spring months.

Erysipelas. Average prevalence; scattered throughout year.

Pneumonia. Average prevalence; January, February, March, April, October, November and December.

Rheumatism. Average prevalence; during the whole year.

Acute Diseases of Stomach. Average prevalence, in connection with intestinal disorder; during the summer months.

- 4. No diseases in any locality that seem to be endemic or peculiar to that locality.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. No diseases have been attended with unusual fatality.
- 7. Have known that scarlet fever has been communicated from one person to another.
- 8. There seems to be a little advance in public sentiment in regard to the importance of sanitary surroundings and means of preventing diseases. Means have been taken to abate the nuisance caused by the offensive smell of the scallop shells along shore; and during the fall of 1883, the rims and all the contents of the shells have been removed clean, and many of the fishermen have left the shells below low water mark; but yet there is more or less offensive smell from them.

E. G. CARPENTER, M. D.

- 1. WARWICK, CROMPTON, CENTREVILLE, PHENIX and surrounding villages.
- 2. Taking sickness of all kinds, there has been about 15 per cent. less than in the past year in my circuit.

3. The prevailing zymotic diseases in my circuit have been as follows:

Cholera Infantum. Very few sporadic cases.

Croup. Sporadic in the last four months of the year.

Diarrhea and Dysentery. Many cases in hot months; not very severe.

Diphtheria. Sporadic in winter and fall; endemic in Crompton in January and February; six cases in one family, two fatal, in the course of one week; mostly severe.

Malarial Fever. Had less than in the past year.

Typhoid Fever. Prevalent in September and October; principally in the villages of River Point and Birch Hill; none fatal in my practice.

Measles. A few sporadic cases all around the year; very common in December in Crompton and Centreville; rather mild.

Scarlatina. Met a case once in a while; not severe.

Varicella. Scattered in every village; prevailing in Natick during first part of winter.

Whooping Cough. Very common in fall and winter; average.

Anthrax. Have had five cases in October and November in Crompton, and two cases in Lippitt in December.

Other diseases as follows:

Bronchitis. Average, spring and fall.

Erysipelas. But a few cases, in summer.

Cerebro-Spinal Meningitis. Very seldom in my circuit.

Pneumonia. Average prevalence; none in summer.

Rheumatism. More than average in spring and fall; not severe.

Acute Disease of Stomach. Not unusual; some in last part of summer.

Consumption is getting prevalent, principally among the Irish people. I have ten or twelve cases on record for the last year.

- 4. No diseases appear every year in any locality in my circuit that seem to be endemic.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the past year.
  - 6. No diseases have been attended with unusual fatality.
- 7. I have had good evidence that scarlet fever, diphtheria and typhoid fever are essentially contagious diseases.
- 8. Not much advance in public sentiment in regard to the importance of sanitary surroundings, or any increased interest in question appertaining to means of preventing diseases. Some advance in personal and private surroundings.

M. J. E. LEGRIS, M. D.

## NEWPORT COUNTY.

- 1. NEWPORT CITY, JAMESTOWN and MIDDLETOWN.
- 2. The amount of sickness of all kinds has been rather less than usual in this circuit during the past year.

3. The following zymotic diseases have prevailed during the past year, as stated:

Cholera Infantum. July, August and September, average.

Croup. Mostly in winter and spring, but not very prevalent.

Diarrhœa and Dysentery. Very few cases, sporadic, mild.

Diphtheria. Very little, sporadic, not very severe.

Malarial Fever. None.

Typhoid Fever. A very mild form of continued fever through the year, without enteric disturbance, and seldom more than one patient at a time, and never two in same family or immediate neighborhood.

Measles. None that I had knowledge of.

Scarlatina. Very little, if any.

Small Pox. Several cases at beginning of year, continuous from epidemic of previous year, and one imported case of varioloid, very mild, which was successfully isolated.

Whooping Cough. None requiring treatment.

The prevalence of some other diseases were as follows:

Inflammation and Congestion of Brain. No large prevalence, some occasional, without regard to season.

Bronchitis. Quite prevalent in February and March.

Erysipelas. Small prevalence, occasional.

Pneumonia. Quite prevalent in early spring and late winter.

Rheumatism. Small prevalence, scattered cases.

Acute Diseases of Stomach. No prevalence, seldom seen.

- 4. No diseases that regularly appear every year in any locality in this circuit that seem to be endemic.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. No diseases have been attended with unusual fatality.
- 7. In regard to circumstances occurring within my observation or knowledge, that seemed to indicate that scarlet fever, diphtheria or typhoid fever, &c., had been taken or communicated from one person to another, I may say, that I have seen reasons for the conclusion that all these diseases are communicable, and also, that they are not necessarily so, as in the case of measles and small pox, and that they may occur independently.
- 8. There is a general advance in public sentiment in favor of sanitary arrangements, and a great deal of attention and large expenditures given to their perfection.

H. E. TURNER, M. D.

- 1. LITTLE COMPTON and TIVERTON.
- Taking sickness of all kinds, there has been about an average of ordinary years,

3. The following zymotic diseases have prevailed in my circuit during the past year:

Cholera Infantum. A few sporadic cases, warm months.

Diarrhœa and Dysentery. Quite a number of cases of average severity: July, August and September.

Malarial Fever. One imported case of tertian only.

Typhoid Fever. Several cases; one mild, the others of ordinary severity.

Measles. A few cases, October and November.

Scarlatina. Mild epidemic in spring.

Bronchitis. Large prevalence, February, March and November.

Pneumonia. Small number, spring months.

Rheumatism. Average through the year.

- 4. No diseases in any locality in my circuit that seem to be endemic or peculiar to that locality.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. No diseases have been attended with unusual fatality.
- 8. No advance in public sentiment or of individuals, in this circuit, in regard to the importance of sanitary surroundings, and apparently no interest.

CHAS. A. GOULD, M. D.

- 1. TIVERTON.
- 2. During 1883, I have known of but little sickness, comparatively. One of the healthiest years in this place.
  - 3. The following diseases have prevailed in this circuit during the year:

Cholera Infantum. A few cases during July, August and September, of average standing.

Croup. Several cases of catarrhal croup, and a few of membranous croup.

Diarrhœa and Dysentery. Several cases of sporadic diarrhœa and a few cases of dysentery during latter part of summer and fall. Probable cause, drouth.

Diphtheria. I do not remember a single case of true diphtheria, but many cases of follicula-tonsillitis, which are so often termed by the laity, and sometimes by "Drs.," diphtheria, but which will be well and out in three or four days under appropriate treatment.

Malarial Fever. Two or three imported cases.

Typhoid Fever. In the north part of the town, especially among the mill help, there were several cases reported, together with a few deaths. Investigations revealed among a portion of the foreign element a total lack of regard for the first principles of sanitation. There were also many cases in tenements over the city line of help which were employed in mills in this town.

Measles. A few cases at the north end.

No disease becoming epidemic.

Inflammation and Congestion of Brain. Small number, warm months.

Bronchitis. Average through the year.

Pneumonia. Small prevalence, spring, fall and winter.

Chronic and Sub-Acute Rheumatism. Large prevalence, fall, winter and spring. Acute, very little.

Acute Diseases of Stomach. Small number.

- 4. The diseases that regularly appear every year, that seem to be endemic or peculiar to localities, are cholera infantum, diarrhœa and dysentery, as heretofore reported.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. The fatality has been rather less from diseases than usual in my circuit.
- 7. In regard to circumstances occurring within my observation or knowledge that seemed to indicate that typhoid fever was communicated from one person to another, I might say that an investigation into the above mentioned cases of typhoid, if possible to get at the truth, I believe proved contamination of the drinking water to have been the cause.
- 8. I think there is an advance in public sentiment, as I find the last two years the authorities are more ready to investigate alleged cases of contamination.

E. P. STIMSON, M. D.

- 1. NEW SHOREHAM.
- 2. Taking sickness of all kinds, there has been less than usual in my circuit during the past year, but not in a very marked degree.
  - 3. The following diseases have prevailed in my circuit during the year:

Cholera Infantum. A few cases, sporadic, average, in September.

Diarrhœa and Dysentery. Slightly prevalent during hot weather.

Typhoid Fever. Sporadic, average, occurred during September and October.

Measles. A few cases only, sporadic, very mild.

Scarlatina. A few cases only, sporadic, mild.

Whooping Cough. Epidemic, average severity during the winter.

Mumps. Epidemic, severe during the winter.

Inflammation and Congestion of Brain. Very small number, warm season.

Bronchitis. Small prevalence.

Erysipelas. Not prevalent, two cases only.

Rheumatism. Average through the year.

Acute Diseases of Stomach. Small number, not common.

- 4. No diseases that regularly appear every year, in any locality, that seem to be peculiar to that locality.
- 5. No diseases have had unusually large prevalence during the year, except as mentioned above.
- 6. No diseases have been attended with unusual fatality. Deaths have been mainly aged people.

8. I think there is a gradual advance in public opinion in regard to the importance of sanitary surroundings. More pains are taken about dwelling-houses to remove filth, &c., and in new dwellings more attention is paid to the size and location of sleeping rooms. The Town Council also passed rules in regard to the removal of fish offal, &c.

C. H. HADLEY, M. D.

## PROVIDENCE COUNTY.

- 1. Lonsdale and vicinity, Cumberland and Lincoln.
- 2. Taking sickness of all kinds, it would compare well with the previous year.
- 3. The following zymotic diseases have prevailed in this circuit during the year:

Cholera Infantum. A few mild cases in August and September, not as prevalent as last year.

Croup. A few cases of pseudo-croup during winter months.

Diarrhœa and Dysentery. A large number, sporadic and of a severe type, in July and September.

Diphtheria. One case in December, severe.

Malarial Fever. Many cases of malarial fever—93 in all: March, 1; April, 3; May, 4; June, 7; July, 1; August, 27; September, 40; October, 10. In no case did the second chill occur when treatment was followed.

Measles. A few mild cases in July.

Scarlatina. Several cases, mostly of a mild type, during the months of February, April, May, June, September, October and December; greatest number of cases in December.

No important disease becoming epidemic, unless malarial fevers, in September, be so termed.

Other diseases occurred as follows:

Inflammation and Congestion of Brain. One case chronic meningitis, no acute cases.

Bronchitis. About the usual number, mostly in spring.

Erysipelas. A few mild cases in April.

Pneumonia. A few cases in January and February, not severe.

Rheumatism. A few cases in April and September, average severity.

- 4. No diseases that appear every year, in any locality, that seem to be peculiar to that locality.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. No unusual fatality.
- 7. No circumstance occurred within my observation or knowledge that seemed to indicate that scarlet fever, diphtheria or typhoid fever had been taken or com-

municated from one person to another, except where one member of the family has had scarlet fever and other members have been taken with the same disease.

8. See no advance in public sentiment or of individuals in regard to the importance of sanitary surroundings.

E. A. KEMP, M. D.

- 1. VALLEY FALLS and vicinity, CUMBERLAND and LINCOLN.
- 2. Taking sickness of all kinds, there has been about the usual amount during the past year.
- 3. The following diseases have prevailed in my circuit during the past year, as stated below:

Cholera Infantum. Sporadic, average amount, mild, summer.

Croup. Very few cases.

Diarrhœa and Dysentery. Very little.

Malarial Fever. Sporadic, average, mostly in the autumn months.

Typhoid Fever. Sporadic, severe, June to November; Albion.

Measles. A few mild cases.

Scarlatina. A few mild cases.

Whooping Cough. Very few cases.

No important disease becoming epidemic.

Bronchitis. Average prevalence, March, April and November.

Erysipelas. Small prevalence, December.

Pneumonia. Small prevalence, January.

Rheumatism. Average prevalence, through the year.

Acute Diseases of Stomach. Small prevalence, July and August.

- 4. No diseases appear to be endemic or peculiar to any locality.
- 5. No diseases had unusually large prevalence during the year.
- 6. No diseases have been attended with unusual fatality.
- 7. Nothing worthy of mention occurred within my observation or knowledge that seemed to indicate that scarlet fever, diphtheria or typhoid fever had been taken or communicated from one person to another.
- 8. No advance in public sentiment or of individuals apparent in regard to the importance of sanitary surroundings, or to means of preventing diseases, and promoting individual and general health.

G. B. HAINES, M. D.

- 1. Johnston, Cranston and west part of Providence City.
- 2. Including sickness of all kinds, there has been more than usual in this circuit during the past year. Should estimate about 15 per cent. more.
  - 3. The following zymotic diseases have prevailed during the year.

Cholera Infantum. All sporadic, mild as a rule; May and summer months and no especial locality.

Croup. Sporadic, more severe than usual; May, September, October and December.

Diarrhœa and Dysentery. Summer months, sporadic, average; localities all about. Winter cholera in February and March.

Diphtheria. Epidemic around Mt. Pleasant, otherwise sporadic; severe in spring and September.

Malarial Fever. General prevalence all about, more or less all through the year, but especially in warm weather; rather severe as a rule; epidemic.

Typhoid Fever. Generally about Olneyville, sporadic; September to December, severe.

Measles. November and December, sporadic, severe; Plain Farm district.

Scarlatina. General, mild, September to December; a few cases in April, sporadic.

Whooping Cough. Sporadic, few cases in October, mild, all about.

Cerebro-Spinal Meningitis. Several cases in Silver Lake district, generally severe; seen in November and December.

Mumps. Very unusual large prevalence.

Other diseases as follows:

Inflammation and Congestion of Brain. Large prevalence, November and December.

Bronchitis. Average prevalence, cold months.

Erysipelas. Small number, September and October.

Pneumonia. Average prevalence, all cold months and late spring.

Rheumatism. Average, spring and early fall.

Acute Diseases of Stomach. Large prevalence, hot weather.

4. No disease that regularly appears every year, in any locality, that seems to be endemic or peculiar to that locality.

Malarial troubles occur all about this town and adjoining towns.

- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the past year.
- 6. The diseases that have been attended with unusual fatality are meningitis, pneumonia and typhoid fever.
- 8. Have seen but little evidence of advance in public sentiment or of individuals, in this circuit, in regard to the importance of sanitary surroundings, or interest in means of preventing disease.

G. R. FISHER, M. D.

- 1. Johnston and Providence.
- 2. Taking sickness of all kinds, there has been more in this circuit during the past year than during the preceding year—about 10 per cent.
- 3. The following zymotic diseases have prevailed in this circuit during the year:

Cholera Infantum. Sporadic cases during the summer months.

Croup. Quite prevalent near the close of the year.

Diarrhœa and Dysentery. Epidemically prevalent in months of March and July, less common in other months.

Diphtheria. A few mild, sporadic cases during the year; no mortality therefrom.

Malarial Fever. From April to November quite prevalent, notably so from July to November; more cases treated than during the previous two years.

Typhoid Fever. Only a few mild and manageable cases during the year.

Measles. Only cases of rötheln.

Whooping Cough. A few cases.

The following diseases prevailed as stated:

Inflammation and Congestion of Brain. Cases of cerebral inflammation and one of apoplexy, occurring during month of February.

Bronchitis. Largely prevalent during winter and March, less so in other months.

Erysipelas. A few sporadic cases through the year.

Pneumonia. A few cases in February and June.

Rheumatism. Very prevalent in February, quite prevalent in January, March, April, May, November and December.

Acute Diseases of Stomach. Sub-acute form, quite prevalent through the entire year.

- 4. No diseases in any locality, to my knowledge, that seem to be peculiar to that locality.
- 6. Fully the average mortality from brain disease, phthisis and cholera infantum.
- 7. I am able to record no instances of above maladies in which the element of contagion may be admitted as a factor during the past year.
- 8. There does appear to be an improvement or an increase of interest among the people of Johnston in sanitary matters and measures.

L. D. McLean, M. D.

- 1. GLOCESTER, parts of BURRILLVILLE and SMITHFIELD.
- 2. Taking sickness of all kinds, there has been about 15 per cent. less than usual in this circuit during the past year.
- 3. The following zymotic diseases have prevailed in this circuit during the year:

Cholera Infantum. Sporadic only, mild, summer months.

Diarrhea and Dysentery. Sporadic, average throughout the year, but more in the summer months; no definite locality.

Typhoid Fever. Sporadic only, October, November and December, mostly mild; no two cases in same vicinity.

Measles. In eastern part of Burrillville; a few cases in West Glocester; some severe cases, but no complications; July and August, in Burrillville; December, in West Glocester.

Whooping Cough. Eastern part of Burrillville and Smithfield, mild, September and October.

Other diseases:

Bronchitis. Average prevalence throughout year.

Erysipelas. Average prevalence, October and November.

Pneumonia. Average prevalence, largest in spring and fall months.

Rheumatism. Less than usual.

Acute Diseases of Stomach. Average, not frequent.

- 4. No diseases in any locality in this circuit that seem to be endemic or peculiar to that locality.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. No unusual fatality.
- 7. No unusual circumstances occurred that seemed to indicate that typhoid fever had been taken or communicated from one person to another.
- 8. No evidence of advance in public sentiment or of individuals in regard to the importance of sanitary surroundings.

Drs. Potter & Harris.

- 1. CENTRAL FALLS and vicinity, LINCOLN and PAWTUCKET.
- 2. The amount of sickness of all kinds, has been about the same as usual in this circuit during the past year.
  - 3. The following zymotic diseases have prevailed during the year as stated:

Cholera Infantum. Not largely.

Croup. Very few cases.

Diarrhea and Dysentery. To some extent.

Diphtheria. Rather more than previous year.

Malarial Fever. The same as last year, average severity.

Typhoid Fever. Less than usual.

Scarlatina. A few cases only.

Whooping Cough. None of account.

- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the year.
  - 6. No unusual fatality.
- 7. No circumstances occurred within my observation or knowledge that seemed to indicate that scarlet fever, diphtheria or typhoid fever had been communicated from one person to another.
- 8. There has seemed to be some advance in public sentiment and of individuals, in my circuit, in regard to the importance of sanitary surroundings, and to means of preventing diseases and promoting general health.

A. A. MANN, M. D.

- 1. North part of Scituate and parts of Johnston, Smithfield, Glocester and Foster.
- 2. Taking sickness of all kinds, there has been about 10 per cent. more than usual in my circuit during the past year.
- 3. The following are the principal diseases that have prevailed in my circuit during the past year:

Cholera Infantum. July and August, average, sporadic.

Croup. Very few, less than usual.

Diarrhœa and Dysentery. July, August and September, severe.

Diphtheria. Occasional.

Malarial Fever. New disease in this locality; June, July, August and September, large prevalence, average severity.

Typhoid Fever. August, September, October, November and December, severe, sporadic.

None of the above mentioned diseases assumed an epidemic character, except malarial fever.

Bronchitis. Average prevalence, in some degree of severity in nearly every month in the year.

Erysipelas. Average prevalence.

Pneumonia. Average of other years in prevalence and severity, mostly in spring and fall.

Rheumatism. Average prevalence, largely in the spring and fall.

- 4. No diseases in any locality that seem to be peculiar to that locality.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the past year.
  - 6. No diseases have been attended with unusual fatality.
- 7. Nothing unusual to indicate that scarlet fever, diphtheria or typhoid fever had been taken or communicated from one person to another.

W. J. SMITH, M. D.

- 1. SMITHFIELD, GREENVILLE circuit.
- 2. Taking sickness of all kinds, there has been one-fourth less than usual in this circuit during the past year.
- 3. The following zymotic diseases have prevailed in this circuit during the year:

Cholera Infantum. Small prevalence, and mild in type.

Croup. Small prevalence, and average in type.

Diarrhœa and Dysentery. Small prevalence, and also mild.

Diphtheria. Very small number, average severity.

Malarial Fever. Should say about one-half that of the previous year, average severity.

Typhoid Fever. Not very prevalent, average severity.

Measles. A few cases, mild.

Whooping Cough. A small number, mild in type.

Other diseases as follows:

Inflammation and Congestion of Brain. Small prevalence only.

Bronchitis. Average prevalence through the year.

Erysipelas. A few cases only.

Cerebro-Spinal Meningitis. Small number only.

Pneumonia. Large prevalence, mostly in March and April.

Rheumatism. Average through the year.

Acute Diseases of Stomach. Average prevalence, not large.

- 4. No diseases in any locality that seem to be peculiar to that locality.
- 5. No diseases have had unusually large prevalence during the year.
- 6. No unusual fatality.
- 8. I think there is some advance in public sentiment and also of individuals, in this circuit, in regard to the importance of sanitary surroundings, and some increased interest in questions appertaining to means of preventing diseases, as the people become better informed.

R. P. EDDY, M. D.

- 1. PAWTUCKET, LINCOLN and NORTH PROVIDENCE.
- 2. Of sickness of all kinds, there has been somewhat less than usual in this circuit during the past year.
  - 3. The following zymotic diseases have prevailed during the year:

Cholera Infantum.  $\Lambda$  few mild cases during the early part of the summer; sporadic.

Croup. Only a few cases early in the year, none in the latter part of the year.

Diarrhœa and Dysentery. Considerably less than usual, and of a mild character; mostly early in the summer and autumn.

Diphtheria. No epidemic; few cases in latter part of winter of 1882 and 1883; very little in latter part of 1883.

Malarial Fever. Considerable, mild, not confined to any locality, but more prevalent in the eastern part of Pawtucket, on "The Plains."

Typhoid Fever. No epidemic, sporadic cases, about the usual number, less in the autumn and more in the winter.

Measles. Very few cases since early in the year, and then no epidemic.

Scarlatina. Not epidemic, few cases and mild.

Whooping Cough. Small amount.

No disease becoming epidemic.

Inflammation and Congestion of Brain. Average prevalence and severity.

Bronchitis. Average of ordinary years and seasons.

Erysipelas. Small prevalence.

Cerebro-Spinal Meningitis. Quite infrequent,

Pneumonia. Large prevalence, January, February and December, average severity.

Rheumatism. Average through the year.

Acute Diseases of Stomach. Small number usually.

- 4. No diseases that regularly appear every year in any locality that seem to be endemic or peculiar to that locality, except malaria, in eastern part of Pawtucket.
- 5. No diseases, not classed as zymotics, have had unsually large prevalence during the year.
  - 6. No unusual fatality from any disease.

F. B. FULLER, M. D.

- 1. Woonsocket, Cumberland and North Smithfield.
- 2. The general amount of sickness of all kinds, has been about the same as usual in this circuit during the past year.
  - 3. The following diseases have prevailed during the year:

Cholera Infantum. Small prevalence only.

Croup. Infrequent.

Diarrhœa and Dysentery. Moderate prevalence in the warm months.

Diphtheria. A few cases.

Malarial Fever. Largely prevalent, mostly of mild type, but persistently recurring; worst forms in lowest and filthiest portions of town, but the elevated districts have not escaped; present all the year round.

Typhoid Fever. Sporadic cases, no great number of typhoid patients.

Measles. Few cases.

Scarlatina. Very few cases.

Bronchitis. Average prevalence, November, December, January, February and March.

Erysipelas. Above average, November and December.

Pneumonia. Average prevalence, larger in December.

Rheumatism. Average through the year.

Acute Disease of Stomach. Small number only.

- 4. No diseases in any locality that seem to be peculiar to that locality.
- 5. No diseases, not classed as zymotics, had unusually large prevalence during the year.
  - 6. No unusual fatality.
- 7. Can trace nearly all cases of scarlet fever to sources—not often diphtheria or typhoid fever.
- 8. I think there is some advance in public sentiment in this circuit in regard to the importance of sanitary surroundings, and increased interest in means of preventing diseases. People build houses with greater care for private use as well as to let. Constant talk in regard to diseases of malarial character is also to be heard on all sides, with suggestions as to mode of avoidance.

WM. C. MONROE, M. D.

- 1. PROVIDENCE CITY.
- 2. The amount of general or special sickness in the city of Providence is ascertained by inquiry, from time to time, as opportunity occurs during each month, of practicing physicians located in different parts of the city. The amount of sickness from some special disease frequently varies very largely in different sections of the city, and the amount of sickness of all kinds will also vary considerably at different times during the year, not only in the different wards, but in parts of wards. The same is also true of the country towns. Of the whole amount of sickness in the city during the year 1883, as compared with previous years, it is believed that in proportion to the population it has been very slightly less.
- 3. The following zymotic diseases have prevailed in this city during the year: Cholera Infantum. In the usual summer months, sporadic, of ordinary severity, and lessened prevalence compared with the previous year.

Croup. Hardly the average prevalence of previous years, the severity varying, particularly severe in January and October.

Diarrhœa and Dysentery. Taking the whole year, the diarrhœal diseases, not including cholera infantum, have had a somewhat larger prevalence. During the winter months a form of diarrhœa, called winter cholera, was very prevalent, assuming at one time epidemic proportions, producing in some cases excessive prostration, but seldom fatal if uncomplicated with other diseases. This form of diarrhœa was restricted to no particular section of the city, nor was it peculiar to Providence city. During the summer months, ordinary diarrhœal diseases, not including cholera infantum, were also quite largely prevalent, but not epidemic, of about usual severity, and not restricted in locality.

Diphtheria. Had a general and rather less than average prevalence, of ordinary severity, scattered through the year, although quite infrequent during July and August.

Malarial Fever. Including all forms, had a general prevalence throughout the city, largely lessened from previous years in the extreme southern border, about an average everywhere else; sporadic, of ordinary severity, and occurring more largely from July to December.

Typhoid Fever. The epidemic of the fall of 1882, ran over into January, with lessened prevalence, however, and lessened severity, and was followed about the middle of January by the winter cholera, so called, until about the middle of March, when another epidemic of typhoid fever occurred, of severe form, and continuing about three weeks. During the fall months it prevailed sporadically to about the usual extent, but with rather less than ordinary severity. In each of the periods named, it was not ascertained that it was confined to any one part of the city more than another.

Measles. Prevailed through the year, small numbers, mild form, general.

Scarlatina. Sporadic, mild, infrequent.

Small Pox. One case only, imported, fatal.

Whooping Cough. Very small prevalence, much less than the average, mild form generally.

Cerebro-Spinal Meningitis. Rather larger prevalence than usual, but not frequent, and in no particular season or part of the city.

Of other diseases of importance there were:

Inflammation and Congestion of Brain. About usual number, usual severity, and no particular season or location.

Bronchitis. Usual prevalence, sporadic all months, most severe in March, April and November, all localities.

Erysipelas. All forms, about the usual number, sporadic, usual severity, no particular month or locality.

Pneumonia. Increased prevalence over 1882, not so large prevalence in proportion to the population as in some previous years. Quite frequent during the first four or five months in the year, and generally represented as of quite unusual severity. Few cases during the warm months, but frequent again in the fall months and much milder in form than in the earlier part of the year.

Rheumatism. Quite prevalent during the first five and last three months of the year, of ordinary severity, general as to locality, and an increase over previous year.

Acute Diseases of Stomach. Have no very definite data. At any rate not unusually frequent.

- 4. Malarial diseases are still endemic in the southern and northwestern borders of the city. No others known.
- 5. The only disease not zymotic having unusually large prevalence was pneumonia.
  - 6. Pneumonia and typhoid fever, each in the earlier months of the year.
- 8. It is very evident that the average individual is becoming more and more interested in regard to the importance of sanitary surroundings, indoors and outdoors, which carries with it also the inseparable accompaniment of a desire to prevent the occurrence of disease.

C. H. FISHER, M. D.

## WASHINGTON COUNTY.

- 1. Hopkinton and Richmond.
- 2. I think taking sickness of all kinds, there has been about 10 per cent. less than usual in this circuit during the past year.
  - 3. The following zymotic diseases have prevailed during the year:

Cholera Infantum. Prevailed sporadically in July and August.

Croup. There has been but little croup, and that of a mild form; no membranous croup.

Diarrhœa and Dysentery. These diseases were quite common during the summer months, and of a mild type.

Diphtheria. Diphtheria in a mild form has prevailed during most of the year, but not epidemically.

Malarial Fever. Sporadic cases of malarial fever occurred in the autumn; type mild.

Typhoid Fever. Occurred in August, September and October, in the northern part of the town and in Centreville, appeared almost like an epidemic; type rather severe.

Measles. Some cases of measles occurred during the year, in April, May and June.

Diseases not zymotic as follows:

Inflammation and Congestion of Brain. But few cases of primary inflammation of the brain have occurred during the year.

Bronchitis. Acute bronchitis has been very prevalent during the winter and spring months.

Erysipelas. Some few cases have occurred.

Pneumonia. Prevalence fifty per cent. less than usual.

Rheumatism. Sub-acute rheumatism has been very common, especially in the fall and winter.

Acute Diseases of Stomach. Gastritis has been more prevalent than usual; no particular season.

- 4. No diseases that regularly appear every year in any locality that seem to be endemic.
  - 5. Rheumatism has had unusually large prevalence during the past year.
- 6. No disease has been very fatal during the year. I estimate the death rate fifty per cent. less than the average.
- 8. No advance in public sentiment or of individuals observable in my circuit in regard to the importance of sanitary surroundings, or increased interest in means of preventing diseases.

E. P. CLARK, M. D.

- 1. Hopkinton and northern part of Westerly.
- 2. The amount of sickness during the year 1883 has been greater by 10 per cent., more especially during the first six months.
- 3. The following zymotic diseases have prevailed in my circuit during the year:

Croup. There have been a few sporadic cases of croup, mostly of a mild nature, during the winter and spring months.

Diarrhœa and Dysentery. Prevailed to about the usual extent in July, August and September, of about the average severity.

Diphtheria. There have been a few sporadic cases of diphtheria of a severe nature, not confined to any month.

Malarial Fever. Only a very few cases of malarial fever, with the exception of imported cases.

Typhoid Fever. Has prevailed to about the usual extent, most of the cases of a severe nature, during the months of October, November and December.

Measles. Prevailed of average severity, during spring and early summer.

Scarlatina. Sporadic, and in a mild form during the fall and winter.

Whooping Cough. Prevailed in a severe form, as an epidemic, during the summer and early fall.

No other important disease becoming epidemic.

Of other diseases:

Bronchitis. Large prevalence in the spring months.

Erysipelas. Small number only.

Pneumonia. Average through the year.

Rheumatism. Large prevalence January and February; also, November and December.

Acute diseases of Stomach. Average prevalence.

- 5. The diseases that have had unusually large prevalence during the past year are rheumatism, influenza and bronchitis.
  - 6. Typhoid fever has been attended with unusual fatality.
- 8. No noticeable advance in public sentiment or of individuals, in this circuit, in regard to the importance of sanitary surroundings, or increased interest in questions appertaining to means of preventing diseases.

A. B. Briggs, M. D.

- 1. RICHMOND, northern part of Charlestown and eastern part of Hop-kinton.
- 2. During the months of September, October and November, there was less than the average amount of sickness; average amount during the early part of the year.
  - 3. The following diseases have prevailed in this circuit during the year:

Cholera Infantum. Very little, and mild cases, summer months.

Croup. Not frequent, mild, spring and fall.

Diarrhœa and Dysentery. Average amount, rather severe in the warm season.

Diphtheria. Very little in amount, mild cases.

Malarial Fever. Small prevalence, July to November.

Typhoid Fever. Not very prevalent, mild, September to November.

Measles. A few cases, average severity.

Scarlatina. Small prevalence, mild form.

Whooping Cough. Epidemic at Wood River Mills, month of November some severe cases.

No other disease becoming epidemic.

Inflammation and Congestion of Brain. Very little, mild, July and August.

Bronchitis. Average amount, scattered through nearly all months of the year.

Erysipelas. Average prevalence compared with previous years.

Pneumonia. Rather more than the average number of cases, severe during March and April.

Rheumatism. Average amount, scattered through the year.

Acute Diseases of Stomach. Rather above average during fall and winter.

- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the past year.
  - 6. No diseases have been attended with unusual fatality.
- 8. There has been no observable advance in public sentiment in regard to better sanitary surroundings, but many families in my circuit are giving their attention to a better drainage about their own dwellings.

A. H. ECCLESTON, M. D.

- 1. WESTERLY and vicinity.
- 2. The general sickness, taken as a whole, has been about as usual. Less typhoid and more malarial.
  - 3. The following zymotic diseases have prevailed as stated below:

Cholera Infantum. Mild, general, from June to October, inclusive.

Croup. Prevalence about as common, general.

Diarrhœa and Dysentery. Rather more dysentery than usual. Diarrhœa about as usual. Dysentery quite severe. Diarrhœas average.

Diphtheria. Less than usual, average, more or less during the year.

Malarial Fever. Fifteen per cent. more than ever before. Not very severe, quite a mild form. More or less every month. More latter part of summer and through the fall. Not confined to any one locality. General.

Typhoid Fever. Less than usual, average severity, autumn months.

Measles. Last spring months, average severity.

Scarlatina. More or less during the whole year, average.

Whooping Cough. Last spring months, average severity.

No disease becoming epidemic during the year. All have seemed to be sporadic.

Inflammation and Congestion of Brain. Small prevalence.

Bronchitis. Average through the year.

Erysipelas. Small number only.

Cerebro Spinal Meningitis. Infrequent.

Pneumonia. Average prevalence, spring and fall months.

Rheumatism. Average through the year.

Acute diseases of Stomach. Average of other years, small number.

- 4. There are no diseases that appear every year in any locality in this circuit, that seem to be endemic or peculiar to that locality, unless it might be that malarial fever be such, which has been quite prevalent in Stillmanville for the past three years.
- 5. No diseases, not classed as zymotics, have had unusually large prevalence during the past year.
  - 6. No unusual fatality.

- 7. No circumstances occurred within my observation during the year that seemed to indicate that scarlet fever, diphtheria or typhoid fever had taken or communicated from one person to another, except as scarlet fever is apt to attack all the children of the same household if one happens to have it. This is not always the case by any means. Sometimes the exception would seem to be the rule.
- 8. As to any advance in public sentiment or of individuals in regard to the importance of sanitary surroundings, or means of preventing disease, there is not as great improvement as I should like to report. But I think there is some improvement on this subject. For the past year more care has been exercised to exclude the children from our public schools where there is either scarlet fever or diphtheria in their families, than ever before. One important step in advance.

H. N. CRANDALL, M. D.

# REPORTS FROM TOWNS

In Relation to Sanitary Improvements.

Reports from town authorities have been solicited as in previous years, in continuance of the purpose of the Secretary to keep well informed of all proceedings throughout the State, on the part of town or city councils, or any form of municipal authority, in the direction of improvements which have in view and seem to promise the promotion of the public health; by the abatement of nuisances; the removal of unsanitary conditions and surroundings; or by the introduction or establishment of public works, which may not only be of great public ntility and convenience, but also serve in some measure, large or small, in the prevention of disease.

It is hoped that a connected history may thereby be secured of all sanitary improvements of a public character in all parts of the State, from year to year, and the gradual awakening of the citizens of the different towns to the necessity of sanitary public measures shown, and also whatever intelligent appreciation of such necessity, and whatever public spirit in existence in the towns there may be, as manifested by the readiness with which needed sanitary measures are adopted.

For this purpose a circular has been sent, at the close of every year, to each town and city clerk in the State, wherein various questions are submitted in relation to the proceedings of the respective town and city authorities, in the direction of general sanitation, during the preceding year.

The following is the form of circular sent at the close of the year 1883:

## CIRCULAR S.

OFFICE OF SECRETARY OF THE STATE BOARD OF HEALTH,

PROVIDENCE, R. I, Jan. 1, 1884.

To the Town Clerk:

It is, by statute law, made the duty of the Secretary of the State Board of Health, to make inquiries of the clerks of local boards of health, (town councils)

in regard to the general health and sanitary condition of the towns, and also in regard to measures taken for the improvement of the same.

The law reads as follows:

## PUBLIC STATUTES, CHAPTER 83.

Sec. 6. The secretary of the said board shall make inquiry from time to time, of the clerks of town and local boards of health and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health, in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals, in their several towns and localities, respectively; and the said clerks of town and local boards of health, and said practicing physicians, shall give such information, in reply to said inquiries, of such facts and circumstances as have come to their knowledge.

The Secretary therefore respectfully makes the following inquiries:

- 1. Has there been, within your knowledge, any very fatal or very serious disease, that has prevailed largely in your town during the last year?
- 2. Have there been any cases of small pox in your town during the last year? If any, how many cases and how many deaths have come to your knowledge? Do you know the source from whence derived?
- 3. Has any widely spread or largely fatal disease occurred among domestic animals in your town during the year? If any, please give name of disease or diseases, locality and time of the year when prevalent.
- 4. Has any work for the promotion of public health been contemplated, commenced or completed in your town, by the proper authorities of the town during the year? If any, please state what.
- 5. If by introduction of water for general use, please state from what source, how large the supply, and what proportion of the population by estimation, were supplied with the same at the end of the year.
- 6. If by sewerage, state what the aggregate length of sewers, whether of iron or brick, where emptying, and what proportion of population had drainage connection with them at the end of the year.

- 7. If by abatement of nuisances, or by improvement in heating or ventilating public buildings, halls, school houses, &c., or by drainage of water-soaked ground around and beneath houses, or by compelling the removal of excretæ, garbage, house refuse, &c., or for any other purpose. Please give terms and date of enactment of town ordinance, or send copy of same, and also state how far the ordinances have been enforced.
- 8. Has your town any legal board of health beside the town council? If so, please give the names of the officers of the same.
- 9. Do you have health officers in your town, responsible to town council, instead of an organized board of health? If so, please give names of said officers.
- 10. Has gratuitous vaccination been provided in your town during the past year?

# Respectfully,

## CHAS. H. FISHER,

Sec. State Board of Health.

N. B. The town clerk should charge a remunerative fee for replying to the above circular, and present to the town council, it being a service required by law.

## REPORTS FROM TOWN CLERKS

In relation to the prevalence of disease, and of legal proceedings in regard to public sanitary improvements, and the promotion of public health.

### BRISTOL COUNTY.

### BARRINGTON.

- 1. There has not been any very fatal disease in this town during 1883.
- 3. No largely fatal disease among domestic animals during the year.
- 4. No work for the promotion of public health, been contemplated, commenced or completed by the town authorities during the year.
  - 5. No introduction of water for general use.

- 7. No abatement of nuisances, or improvement in heating or ventilating public buildings, halls, school houses, &c.
  - 8. No legal board of health beside the town council.
  - 9. No health officers in the town, responsible to town council, or otherwise.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

M. H. Wood.

### BRISTOL.

- 1. There has been no very serious or fatal disease largely prevailing in this town during the year 1883.
  - 2. No cases of small pox.
  - 3. No disease of consequence among domestic animals.
- 4. No particular work for the promotion of public health contemplated by the authorities of the town during the year.
- 5. Water was introduced in 1883 from the Kickamuit river; supply is abundant. About one-tenth of the population have introduced water into their residences.
  - 6. No sewers have been laid.
- 7. The question, No. 7, comes under the supervision of the health officer, and is regulated by an ordinance of the town (for the suppression and prevention of nuisances) enacted in 1872. The town council requires a strict compliance of the same. (See ordinance appended to this report.)
  - 8. No legal board of health beside the town council.
  - 9. Philip B. Bourn, health officer.
- No gratuitous vaccination has been provided in town during the year
   It has been in years before.

H. F. BENNETT.

AN ORDINANCE FOR THE SUPPRESSION AND PREVENTION OF NUISANCES.

It is ordained by the Town Council of the town of Bristol as follows:

Section 1. Any person who shall cause or suffer filthy water to collect on his premises, or premises occupied by him, so as to be prejudicial to health, or who shall cause or suffer the same to run into any public street or highway in this town, and shall not remedy the same within twenty-four hours after notice from any health officer; and any person who shall throw any coal ashes, cinders, shavings, manure, oyster, clam, lobster or other shells, or filth into any of the streets or highways in the compact or other thickly settled parts of said town, or who shall remove or in any way carry the contents of any sink, cess-pool or privy in or through any of said streets or highways between the first day of May and the first day of November in each year, after the time of daylight in the morning or before nine of the clock in the evening, or at any time remove or

carry the contents of any sink, cess-pool or privy in any vessel whatever, unless said vessel is so constructed as not to scatter or leave the contents, shall be fined not less than three, nor more than ten dollars.

- Sec. 2. It shall be the duty of the health officer of this town to examine into the state and condition of every place and part of said town where such officer shall suspect or be informed that there exists any matter or thing which is or may become injurious to the health of the inhabitants thereof.
- Sec. 3. Whenever it shall appear to the satisfaction of any health officer that there exists upon any premises, owned or occupied by any person, any dirt or offal, or any animal or vegetable matter, or the contents of any hog-pen, cowyard, barn, privy, drain or vault, injurious to health or the neighborhood, it shall be the duty of such health officer to cause the owner or occupant of such premises to be notified of the existence of such nuisance or annoyance, and to direct such owner or occupant forthwith to remove or abate the same; and if such nuisance or annoyance shall not be abated within twenty-four hours after such notice, such owner or occupant shall, for each and every day they shall suffer such nuisance or annoyance to remain after the notice aforesaid, be liable to pay a fine of not less than five, nor more than twenty dollars.
- SEC. 4. If such nuisance or annoyance shall not be abated by the owners or occupants of the premises where such nuisance or annoyance exists, at or before the expiration of the notice mentioned in the next preceding section of this ordinance, and if, in the opinion of such health officer, the expense of abating the same will not exceed ten dollars, then it shall be the duty of such health officer to authorize, in writing, the sheriff of the county of Bristol, his deputies or the town sergeant, or either constable or police officers of said town forthwith, to cause such nuisance or annoyance to be abated. And the town council shall order the expense thereof, not exceeding ten dollars, to be paid out of the town treasury, of said town, to the officer abating the same, which said expenses, so paid, as aforesaid, shall be recovered from the party causing or continuing said nuisance or annoyance, in an action of debt, in the name of the town treasurer of said town, before any court of competent jurisdiction.
- SEC. 5. Whenever it shall appear to the satisfaction of any health officer that there exists upon the premises, owned or occupied by any person, any matter or thing injurious to the health of the inhabitants of any part of said town, or which, in his judgment, may originate or conduce to the spreading of any infectious or contagious disease, and that the expense of abating such nnisance or other cause dangerous to health, shall be estimated at more than ten dollars, it shall be the duty of such health officer, as soon as the exigency of the case shall reasonably require, to report the same, in writing, to the town council, setting forth the particulars of such nuisance and the probable expense of removing the same, as nearly as may be, and the owner or occupant of the premises upon which such nuisance or nuisances exist, or the person who may have caused, continued or permitted the said nuisance or nuisances, shall be forthwith notified to appear before the town council, at such time as the council shall appoint, to show cause, if any, why said nuisance shall not be abated or removed. said council, upon satisfactory evidence to them submitted that said nuisance exists, may order the sheriff of said county of Bristol, his deputies or the town sergeant, or either the constables or police officers, of said town, forthwith to

abate the same, and the expenses thereof shall be paid out of the town treasury, and be recovered from the party causing or continuing the same, in the same manner as is prescribed in section 4 of this ordinance.

### BY-LAWS RELATING TO NUISANCES IN THE TOWN OF BRISTOL,

It is ordained by the Town Council of the Town of Bristol as follows:

Whereas, by the statute laws of the State, the town councils of the several towns are authorized and empowered to make, order and establish such rules, regulations and by-laws, (not repugnant to or in violation of the laws of said State,) as they may deem proper for the preservation of the health of the inhabitants, the removal of nuisance, to prevent the introduction or spread of any contagious or infectious disease:

- Section 1. It is therefore enacted by the town council of the town of Bristol, in council assembled, that all privy vaults, sinks, sink drains, sink spouts, cess-pools and the outlets thereof, shall be emptied of their contents and thoroughly cleansed, at least once in each and every year, previous to the first day of June, and oftener, whenever the board of health shall deem it necessary and expedient.
- SEC. 2. And it is further enacted, that all stagnant and fetid waters in any hog-pen or sty, under any stables, barns or cellars, under dwelling houses or stores, shall be removed from the same, at such times and under such regulations and restrictions as the board of health of said town shall order and direct.
- SEC. 3. And it is further enacted, that if any person or persons shall cause or suffer any menhaden or other fish, used for the purpose of manure or fertilizing the soil, to be spread on the surface of the land and there remain for the space of twenty-four hours without being covered over or ploughed under, within the compact part of the town, shall forfeit and pay as fine or penalty, a sum not exceeding twenty dollars for each and every offence; and in case any fish shall remain on land, as aforesaid, after the owner or owners thereof shall be duly notified to remove or bury the same; the same may and shall be removed by any officer or other person or persons designated by the board of health for that purpose, and the proper expense attending the same shall be paid by the person or persons owning said fish.
- SEC. 4. And it is further enacted, that no carcase of any dead dogs, cats, rats or other animals shall be thrown into the public streets or lanes, within the compact part of the town, or in any of the docks, and there left to decay and become offensive.
- SEC. 5. And it is further enacted, that no person or persons shall bury or suffer to be buried, within the limits of the compact part of the town, the bodies of any dead horse, cow, hog or any neat beast, unless by permission or under the direction of the board of health, and the carcases of all such animals shall be buried, at least three feet below the surface of the ground.
- Sec. 6. And it is further enacted, that all docks and wharves, wherein any liquid matter shall be deposited, which shall or may become offensive or deleterious to the health of the inhabitants, shall be thoroughly cleansed and purified, and all such offensive matter removed therefrom, at such times and in such man-

ner, and under such restrictions as the board of health may direct and determine; and all owners and occupants of any such docks or wharves, who shall neglect or refuse, at any time, to conform to such rules and regulations as the board of health may, from time to time, determine, shall forfeit and pay as a fine or penalty, a sum not exceeding fifty dollars, for every neglect or refusal to comply with or perform said rules and regulations.

Sec. 7. And it is further enacted, that all coal or wood ashes, and all refuse matter from any dwelling house or stores, deposited in any yard, alley-way or cellar, which shall become offensive or in any way injurious to the health of the neighborhood, wherein said filth is deposited, shall be removed therefrom when. ever, and at such times as the board of health, or any health officer shall direct, and all violations or neglect of this ordinance shall be punished as hereinafter prescribed.

SEC. 8. It shall be the duty of the surveyor or surveyors of highways, in the compact part of the town, to cause all filth and other impurities to be removed from any or all of the public streets or lanes in his district, and to see that the gutters and outlets are kept clear from all such filth.

SEC. 9. And it is further enacted, that all violations of either the first, second, fourth, fifth, seventh and eighth sections of this act, shall be punished by a fine not exceeding ten dollars for each and every violation thereof, and that all fines, penalties and forfeitures shall be recovered by action of debt before any justice of the peace or court exercising jurisdiction of a justice of the peace, in the name of the town treasurer of said town, and, when so recovered, shall be paid one-half to the complainant in each case, the balance into the treasury of said town, and whenever any nuisance of any kind shall be removed or abated by the direction of the board of health, the expense thereof shall be paid out of the town treasury, and recovered back from the owner, owners or occupant of the premises from which said nuisance is removed or abated, by action of debt, in manner and form as above directed.

This ordinance and by-laws shall go into force immediately after the passage thereof, and all by-laws and ordinances of this council heretofore made in regard to the removal of nuisances and the preservation of the health of the community be, and the same are hereby repealed.

AN ORDINANCE IN RELATION TO DEATHS, BURIAL OR REMOVAL OF THE DEAD.

It is ordained by the Town Council of the town of Bristol as follows:

SECTION 1. Whenever any death shall occur in the town of Bristol, it shall be the duty of the undertaker, or the person who has charge of the burial or removal of the body of the decedent to obtain before burial or removal of same, the physician's certificate (if a physician was in attendance) of the name, date and cause of death; and said physician shall exercise due courtesy and diligence in furnishing said certificate; and if no physician was in attendance, then to obtain from such sources as shall seem most reliable, the cause of death, and with the same, all the facts required by law in the Public Statutes, (Chapter 85, Section 3) as shown in the blank returns of death, and make or present the said returns to the town clerk of said town,

- Sec. 2. It shall be the duty of the town clerk upon the presentation or return of a death in accordance with law, and to his satisfaction, to issue to said undertaker or other person a permit or certificate of permission to bury, entomb, or remove the body of said deceased person without the limits of the town.
- SEC. 3. Any person engaged or concerned in the burial, entombment or removal from the town, of the body of a deceased person without a permit, or knowingly violating any of the provisions of the preceding sections, shall be fined not less than one dollar, nor more than twenty dollars.
- Sec. 4. This ordinance shall go into effect on the first day of February, A. D. 1883, and all ordinances of the council heretofore made in relation to deaths, burial, or removal of the dead, are hereby repealed.

Passed in council this eighth day of January, A. D. 1883.

HERBERT F. BENNETT, Council Clerk.

### WARREN.

- 1. No very fatal disease has prevailed largely in the town during the year.
- 2. No cases of small pox.
- 3. No widely spread or largely fatal disease occurred among domestic animals.
- 4. No work for the promotion of public health been contemplated by the proper authorities, to my knowledge.
- 5. Continued use of Kickamuit river water, and very large supply for Warren and Bristol.
  - 6. No sewers or drains of any account, except for surface sewerage.
- 7. The town council visit all places where nuisances are reported, and have such abated at once.
  - 8. No legal board of health beside the town council.
  - 9. No health officers.
- 10. Gratuitous vaccination has been provided in this town during the past year.

H. H. LUTHER.

## KENT COUNTY.

### COVENTRY.

- 1. No very fatal disease has prevailed largely.
- 3. There has not been any unusually fatal disease among domestic animals.
- 4. No special work has been done or contemplated.
- 7. No abatement of nuisances or other sanitary work.
- 8. No board of health beside the town council.
- 9. No health officers in town.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

S. W. GRIFFIN.

### EAST GREENWICH.

- 1. No very serious disease has prevailed largely during the last year.
- 3. No largely fatal disease occurred among domestic animals.
- 4. No work for the promotion of public health been contemplated by the proper authorities of the town during the year.
  - 5. No introduction of water for general use.
  - 6. No sewers constructed.
  - 7. No abatement of nuisances.
  - 8. No legal board of health beside the town council.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

E. STANHOPE.

## WEST GREENWICH.

- 1. No very serious disease has prevailed largely in this town during the last year.
- 3. No widely spread disease occurred among domestic animals during the year.
  - 4. No work for the promotion of public health has been contemplated.
  - 8. No legal board of health beside the town council.
  - 9. No health officers.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

W. N. SWEET.

## WARWICK.

- 1. No very fatal disease has prevailed largely.
- 3. No largely fatal disease occurred among domestic animals.
- 4. No work for the promotion of public health been contemplated.
- 5. "Pawtuxet water" has been introduced into Pawtuxet village, but not for the purpose of promoting health, simply as a convenience.
  - 6. No public sewers made.
- 7. No abatement of nuisances or improvement in heating or ventilating public buildings, halls, school houses, &c.
  - 8. No legal board of health beside the town council.
- 9. We have a town physician (James B. Hanaford), whose chief duty is to attend to the sick poor; he also does free vaccination.
- 10. Gratuitous vaccination has been provided in this town during the past year.

  R. HOYLE.

## NEWPORT COUNTY.

### JAMESTOWN.

- 1. No serious disease has prevailed largely; a few cases of typhoid fever only.
- 2. No cases of small pox.
- 3. No fatal disease among animals.
- 4. No work for the promotion of public health by the proper authorities of the town during the year.
  - 8. No legal board of health beside the town council.
  - 9. No health officers appointed in this town.
- 10. No gratuitous vaccination has been provided in this town during the past year.

J. J. WATSON.

### LITTLE COMPTON.

- 1. Do not know of any very fatal or very serious disease that has prevailed largely in town during the last year.
- 4. No work for the promotion of public health has been contemplated by the proper authorities of the town during the year.
  - 7. No abatement of nuisances.
  - 8. No legal board of health beside the town council.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

F. R. BROWNELL.

## MIDDLETOWN.

- 1. There has not been any prevalence of an epidemic of unusual forms of disease in this town since last report to Board of Health.
- 2. There were no cases of small pox in this town during the year 1883, of which I had any knowledge.
- 3. Domestic animals have been singularly free from disease in this town during the past year.
- 4. The town council of this town have instituted prosecutions to suppress the illegal feeding of swine upon offal brought from the city of Newport, which has imperilled the health of our citizens in former years.
  - 6. No public sewers.
- 7. Nuisances have been abated under the general law of the State, and without the adoption of any special ordinances. One conviction for illegal feeding of swill to swine has been secured under the general law enacted for that purpose.
  - 8. This tewn has no board of health distinct from the town council.

- 9. Two persons were appointed in April, 1883, to inspect nuisances, viz.: John D. Blair and Nathaniel L. Champlin.
- 10. No gratuitous vaccination has been provided in this town during the past year.

A. L. CHASE.

## NEWPORT CITY.

- 1. The health officer reports that no very fatal or very serious disease has prevailed largely in Newport during the last municipal year, except as stated below.
- 2 There were a few cases of small pox at the beginning of the year. Including December, 1882, there were ten cases, and three deaths.
  - 3. No largely fatal disease occurred among domestic animals.
- 4. Quarantine (against small pox) of vessels from Baltimore, Md., strictly enforced early in the year. The following extracts from the Inaugural Address of Mayor Franklin, will indicate the sanitary drift and purposes of the official mind in the city:

Newport of to-day is vastly different from the Newport of half a century ago. It has increased largely in wealth and population, and in many things great improvements have been made. There are matters of vital importance connected with the sanitary condition of our city, which, I trust, you will carefully examine and consider, and which, if judiciously executed, cannot fail to add to our growth and prosperity. Of these I shall take an opportunity to speak.

## CITY ENGINEER.

The city council of last year passed an ordinance establishing the office of city engineer, and defined his duties. In the election of this officer, great care and judgment should be used, as it is a responsible position. One thoroughly conversant with the survey, laying out and grading of streets, locating sewers, etc., should be selected.

## SEWERAGE.

The question of sewerage is a perplexing one. Our present arrangement of building sewers is imperfect. We have, from time to time, at a large outlay, constructed them in such localities as the necessity of the people has demanded without relation to any definite plan. Would it not be better for the city to adopt some regular system, and build in reference to it?

## SANITARY.

Our reputation as a summer resort should not be lessened by any refusal, on the part of those in authority, to use all means within their power to preserve it. We cannot be too particular in regard to our sanitary condition. The experience of the past year satisfies me that the establishment of a board of health, who could give more time and attention to these most important matters, would be beneficial.

5. Water introduced in a previous year has been considerably extended during the year.

6. Sewers were constructed at an expense of \$20,010.84, as follows:

A ten-inch pipe sewer in Dixon street, from Thames street to Spring street, and an eight-inch pipe sewer from Spring to Bellevue avenue.

An eight-inch pipe sewer in Connection street, from Thames to Wilbur avenue.

A pipe sewer in Third street, from Bridge to Maitland court.

An eight-inch pipe sewer in Callendar avenue, from West Broadway to Warner street.

A pipe sewer in William street, from near Spring to near Bellevue avenue.

A ten-inch pipe sewer in Levin street, from Spring street to Thomas street, and an eight-inch pipe thence to the avenue, (nearly completed).

An eight-inch pipe sewer from head of Mann avenue, south on Kay, a distance of four hundred and eighty-five feet.

A two-feet brick sewer on Rhode Island avenue, from Broadway to Kay street, a distance of about thirteen hundred feet. This sewer was twenty-four feet deep for a considerable part of its length. It is eight feet deep at Kay street.

A ten-inch pipe sewer was laid on Bellevue avenue, south from Webster street, to Mrs. Bruen's place. The pipe was furnished by the city and laid at the expense of Mrs. Bruen.

7. The inspector of nuisances reported to the city council as follows, for the year ending June 1, 1883:

To the Honorable City Council of the City of Newport:

The undersigned, inspector of nuisances, respectfully reports for the year ending May 31, 1883:

## NUMBER OF COMPLAINTS BY MYSELF AND OTHERS.

First quarter ending August 31, 1882	560
Second quarter ending November 30, 1882	266
Third quarter ending February 28, 1883	99
Fourth quarter ending May 31, 1883	274

1,199

One thousand, one hundred and ninety-nine, all of which have been abated except three; one of these belongs to the city. Your attention is called to the eye-hole of sewer opposite Coddington property, foot of De Blois lot on the east side of Thames street, in need of a trap to avoid noxious air from annoying the neighborhood. I would state the gravel catchers and sewers have been properly flushed and also disinfected, besides attending to them promptly when they have been cleaned, to see that they were promptly filled with water. The vaults in different cemeteries have been examined and found in good condition and all remains have been removed and no complaints made.

- 8. The city has no legal board of health beside the board of aldermen.
- 9. The health officers of the city are: City physician, Henry E. Turner, M. D.; inspector of nuisances, Charles H. Langley; health officer, Joseph Sherman.
  - 10. Gratuitous vaccination has been provided in this city during the past year.

In reply to question 4, the following form of agreement on the part of the contractors for the removal of swill, garbage, and other house offal, will be pertinent:

THIS AGREEMENT WITNESSETH, That said ..... for himself, his heirs, executors and administrators, hereby covenants and agrees to and with said city of Newport, for the considerations hereinafter named, to take away and carry off to some place or places entirely outside of the limits of said Newport, and there, outside of said limits, to promptly and permanently dispose of, by burying, burning, or otherwise consuming, all the swill and house offal from all the estates and premises (excepting only those whose occupants decline to permit him to do so) in the ......ward of said city, from the date hereof to the end of the present calendar year, four times a week during the months of May, June, July, August, September and October, and three times a week during January, February, March, April, November and December, and oftener at any time, if it shall be required of him by the board of aldermen of said city, or if it be necessary to prevent nuisance and decomposition; to transport out of the city as aforesaid, all such said swill and house offal, in air-tight tubs carried in proper and substantial carts or vehicles drawn by one or more horses or mules; to keep always all said tubs, and carts, clean and well painted, each cart numbered with the license number, and lettered plainly on each side "City Swill Cart;" to keep all the said tubs covered and tightly closed while being drawn in or through the city; to attend daily at the police station in Newport, or send there some competent person fully authorized to act for him, on each of the days for collecting such swill and house offal, between nine o'clock and 11 o'clock, A. M.; to remedy promptly all complaints of neglect, or other complaints which may be made then, or at any time; and not allow any nuisance or annoyance to be caused to any person or corporation in consequence of depositing in any place any such swill or house offal after collecting the same.

The following report of the Sanitary Protection Association, of Newport, now well known in this and other States, will be of interest as indicative of progress in public sentiment in the direction of sanitary improvement in the city:

At the annual meeting of this association the following report for 1882-83 was presented:

The association has continued its efforts during the past year, to improve, by means of inspections and recommendations, the sanitary condition of the dwellings belonging to its members, and has constantly exerted its influence in various ways for the promotion of the public health.

The results of the inspections in many cases show great improvement, particularly in those houses which have been recently constructed, owing to the increased attention paid to sanitary matters by the community and the consequent demand for the improved methods now in use for rendering houses safe and healthy. It is to be desired, however, that members should have their houses

inspected yearly, as otherwise they cannot be certain that everything continues in good condition, and in consequence of the progress of sanitary science it is often possible to add further recommendations of importance and value to those which were made in previous years. Many new members have joined, and the monthly meetings have been for the most part well attended, matters of much interest have been discussed, several important papers presented, and numerous sanitary appliances brought to notice. Letters, as heretofore, are frequently received from various parts of the country, showing a high appreciation of the plan and work of the association, and often asking for information with a view to establishing similar societies.

Thinking that additional benefit will be derived from the inspection of premises by a physician well conversant with the causes of disease, the council have created the office of medical inspector, and elected Dr. Charles L. Fisher to the position. To their great regret they have been deprived of the services of Lieutenant Commander Stedman, one of the founders of the association, who has performed for it most valuable work in the positions both of recording secretary and inspecting engineer, but who has been unavoidably prevented from continuing in office.

The summer of the past year has been memorable for a controversy concerning the sanitary conditions existing at Newport, which excited great attention and interest, not limited merely to the inhabitants and summer residents, but which was also shared in by numbers in distant parts of the country, to whom the celebrity of Newport as a summer resort is well known. At the monthly meeting in August last, remarks were made before the association, at the request of one of its members, by a distinguished physician of New York who has devoted much attention to sanitary science, commenting severely upon the conditions prejudicial to health which were suffered to continue in the city. A fuller statement of this gentleman's views was subsequently published in the Fall River Herald, and also read before another of the monthly meetings. Among the evils especially referred to were imperfect cleaning of the streets, the most frequented part of Bellevue avenue in particular, insufficient and imperfect sewerage with inadequate flushing of the sewers already existing, the use of harbor water taken from near the mouth of one of them for watering the streets, the offensive odors from their catch basins, besides the frequent occurrence of other local nuisances. Although admitting their existence, the members of the association differ somewhat among themselves in their estimate of the degree to which these evils prevailed and as several could not fully agree with all the statements expressed in the paper, it was resolved that no opinion of the views contained in it should be entered upon the records.

An animated discussion was now carried on through the medium of the public press, and was conducted with much vigor and feeling, it being claimed on the one hand that the state of Newport was bad in the extreme, while on the other this statement was emphatically denied, while others again, admitting that it was of much importance that various sanitary measures should be enforced, did not regard the condition of the city as giving occasion for anxiety. For a considerable period long articles continued to appear in the Newport and New York papers, and in those of other cities, in which the different questions at issue were thoroughly considered and various views expressed in regard to them.

A fatal case of cholera, which occurred early in the month of September, created considerable alarm, and much discussion as to its exact nature, and still further increased the deep interest taken by the community in the subject of the city's health. The president of the National Board of Health was called upon to investigate it, and expressed his opinion as follows, in terms which show that there was sufficient reason for the anxiety which its appearance had caused:-"I am constrained to avow my belief that the probabilities are decidedly adverse to the view that the case was one of specific infectious cholera, while I freely admit that the symptoms and post mortem appearances were entirely consistent with such a view." The correctness of this opinion happily received additional confirmation, from the fact that no other case afterwards occurred, although previously one having somewhat similar features had been encountered in the practice of the city physician. The president of the National Board further expressed himself as follows:--" On one point, the conferees were I believe quite unanimous; they concurred in the opinion that whether the case in question was or was not specific, it was in a large degree dependent upon insanitary conditions in Washington street which require prompt removal. The mode of discharging sewage from the houses on that street by drains from each house opening on the shore of the bay above low water mark, is fraught with great danger to the public health and the nuisance demands abatement." He concluded by renewing his recommendation for the formation of a board of health, which he had made on a former occasion.

A petition for the establishment of such a board by the city authorities, a measure which had been also recommended by Mayor Franklin in his inaugural address, was made by the association during the summer, renewing that previously made in the winter of 1880-81, and a committee consisting of three members of the association who cannot be regarded as holding extreme or exaggerated views of the city's needs, had an interview with the mayor and board of aldermen and in thoughtful and temperate language urged them to comply with their request.

No action in the matter having been taken during the past year, His Honor, the Mayor, has again renewed his recommendation at the recent inauguration of the new city government, and the association also has lately communicated its hopes and wishes to the city authorities.

But notwithstanding the numerous requests and petitions that have been from time to time presented for several years, and although it has been recommended by the State Board of Health, by the president of the National Board of Health and by most eminent sanitary authorities, and is the wish of Newport's best citizens who have no other object in view than the proper sanitary management of the city, no further steps toward the formation of a board of health have been recently taken until at the last meeting of the city council, the question was referred to a committee, who it is to be hoped will deem it expedient to accede to the general wishes without unnecessary delay.

In consequence of the complaints regarding the state of the city, and other questions of importance, a meeting, consisting largely of summer residents, was held in the month of September last, and it was urged that inasmuch as a large proportion of the taxes are paid by this part of the population, greater opportunities should be given them for having some voice in municipal affairs. Ac-

cordingly it was decided to ask for an amendment to the city charter changing the time for election of the city officers, and this amendment, which met with little opposition, was granted by the State legislature during the past winter, so that in future the election is to be held in the month of September.

The long expected report of the house to house survey of Newport, made in the winter of 1881-2 for the National Board of Health, at the instance of this association, which had been awaited with great interest as being likely to give a correct picture of the condition of the city, was read before the members, at a special meeting held in November. The result of this survey, which was carried out in great detail, threw abundant light upon this much vexed question, and showed conclusively the bad condition of a large number of premises, and most of the wells in the city proper, refuting completely the statement of those who claim that the condition of the city leaves little to be desired. Together with the report a valuable series of charts was exhibited, giving at a glance the statistics of the whole city and of the wards separately, in regard to the condition of the dwellings and their surroundings, the number, nationality and occupation of the inhabitants, the relative amount of air space, the water used, the sewerage and surface drainage, the disposal of garbage and the amount of illness in the city at the time of the inspection. Special charts of certain localities where illness had occurred were also shown. Besides being listened to by the members of the association, the report was read and the charts shown at an informal meeting of the mayor and board of aldermen, several directors of the city water works company being also present, in the hope that they might be influenced to take some decided action.

To a great degree, therefore, this report confirms the charges brought against the condition of the city. It is not sufficient to answer that the death rate of Newport is low, a fact upon which so much stress has been laid as an argument against more active sanitary measures. The proportion of deaths from zymotic diseases, which sanitarians agree in regarding as preventable, although somewhat lower than in most other parts of the State, is by no means very small when we consider the natural advantages of Newport. Cases of disease plainly due to insanitary conditions, many of which are reported at the meetings of the Newport Medical Society, continue not infrequently to occur, and moreover statistics take no account of the lesser ailments caused by foul air, or of its deleterious effect in gradually perverting the nutrition and undermining the health of those exposed to its influence. There is also reason for believing that a class of diseases that are caused or greatly aggravated by impure air, prevailed to a greater extent than could be reasonably expected during the spring and summer of the past year, although the actual mortality resulting from them was small.

In the reports for 1882 made to the State Board of Health by three of the physicians of Newport, two express this opinion and attribute it to the prevailing drought and to the unsatisfactory condition of the streets, and surroundings of many of the houses, and the Newport Medical Society early in the autumn passed resolutions expressing similar views of the state of the streets, and of other sanitary defects allowed to continue. While there is urgent need of more stringent sanitary measures and regulations in Newport, which the growth of the city renders of constantly increasing importance, it is not desired to convey any exaggerated impression of its condition, which might perhaps have been derived

from several of the newspaper articles of last summer. The evils complained of are not confined to Newport, as we have reason to infer, for example, from the serious epidemic of typhoid fever which prevailed in a neighboring city during the past winter, and are probably no greater than in many other cities of equal size. But Newport, especially holding as it does an almost unique position among the summer resorts of the country, now that its sanitary defects have been repeatedly pointed out cannot afford to neglect or disregard them, and the unwillingness of certain members of the city government to carry out the necessary reforms, has caused such special emphasis to have been laid upon the matter. Apart from the local conditions, the city, as is well known, is remarkably healthy, and the coolness of its summer temperature removes an important factor in causing those diseases which are so fatal, especially to young children, in our large cities. As an additional security to health, the association recommends to persons hiring houses or parts of houses, as well as to those living in boarding houses and hotels, to ask for its certificate that the premises in question have been pronounced in safe condition for residence by one of its inspecting en-

Although in regard to many matters there has been little change, several useful sanitary procedures have been carried out by the city. A general vaccination has been completed during the past spring—many new sewers have been built, among them an important one in Rhode Island avenue, between Kay street and Broadway, and others will soon be in process of construction, though there is still unaccountable delay in adopting any definite system, which the increasing pollution of the inner harbor renders more and more necessary. A petition for the much needed intercepting sewer in Washington street has not yet been granted.

The city has recently appointed a city engineer who will, it is hoped, do much to improve existing conditions and promote important sanitary reforms.

The condition of the city water, if not altogether satisfactory has been fair and the Water Works Company intend still further to improve Easton's pond when the approaching completion of the Hanging Rock pond enables them to commence work upon it. A valuable report upon Easton's pond was presented before the May meeting of the association by Professor Pumpelly, making recommendations for improving it which will doubtless be carefully considered.

These, briefly stated, are first, that measures should be taken for keeping the catch-basin and surroundings of the pond free from contamination; second, the construction of a steep slope around it to prevent alternate overflowing and drying of the margin; third, the removal of the vegetable matter from the bottom of the pond as much as possible.

In other respects progress has not been rapid, and many of the defects complained of last year continue to exist and are a constant source of annoyance and danger. Still, a real interest has been excited about the health of the city, and doubtless by degrees the measures which are needed and which the high rank of Newport among the resorts of the country demands, will be taken to enable it to profit by the advantages so richly conferred upon it by nature.

WILLIAM C. RIVES, Jr., M. D., Recording Secretary.

NEWPORT, July 10th, 1883.

### NEW SHOREHAM.

- 1. There has not been, within my knowledge, any disease that has prevailed largely in this town during the last year.
  - 3. No disease occurred among domestic animals during the year.
- 4. No particular work for the promotion of public health has been contemplated or completed in this town by the authorities of the town during the year. Considerable has been done by private enterprise, and a sanitary inspection of the hotels on the island was made during the summer by the Secretary of the State Board of Health.
  - 6. No public sewers.
- 7. No abatement of nuisances or improvement in heating or ventilating public buildings, halls, school houses, &c., or by compelling the removal of excretæ, garbage, house refuse, &c., or for any other purpose.
  - 8. No legal board of health beside the town council.
  - 9. Dr. C. H. Hadley, health officer.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

  A. N. Rose.

11. 14. 16081

## PORTSMOUTH.

- 1. There has been considerable sickness among our people the past year, but no particular disease has prevailed that I know of.
  - 3. No largely fatal disease occurred among domestic animals.
- 4. There has not been any work for the promotion of public health contemplated or completed in this town by the authorities during the year.
- 7. Nothing has been done in abatement of nuisances or by other improvement for the promotion of health.
  - 8. No legal board of health beside the town council.
  - 9. No health officers.
- 10. No gratuitous vaccination has been provided in this town during the past year.

P. B. CHASE.

## CRANSTON.

- 1. Malarial diseases have prevailed largely in the vicinity of the Cranston Print Works.
  - 2. No cases of small pox.
- 3. No largely fatal disease occurred among domestic animals in this town during the year, to my knowledge.
- 4. No work for the promotion of public health has been contemplated by the authorities of the town during the year,

- 5. Water from the city has been carried to the Narragansett Trotting Park and to Auburn.
  - 6. No public sewers.
- 7. Proprietors of Cranston Print Works ordered to reflow the pond to abate an extensive and probably dangerous nuisance.
- 8. No legal board of health beside the town council, but we have a superintendent of health, responsible to the town council.
  - 9. Dr. Thomas C. Lawton, health officer.
- 10. Gratuitous vaccination has been provided in this town during the past year.

J. M. WHEELER.

#### CUMBERLAND.

- 1. There has not been, within my knowledge, any very fatal or very serious disease that has prevailed largely in this town during the last year.
  - 3. No widely spread disease occurred among domestic animals.
- 4. No work for the promotion of public health has been contemplated to my knowledge.
  - 6. No public sewerage.
- 7. Nothing done in abatement of nuisances, or by improvements otherwise by authorities of the town.
  - 8. No legal board of health beside the town council.

The health officers are Dr. George B. Haines, Dr. Lucius F. C. Garvin and Dr. Henry W. Stillman.

10. No gratuitous vaccination has been provided in the town during the past year.

H. A. FOLLETT.

#### FOSTER.

- 1. No very serious disease has prevailed largely in Foster during the last year.
- 3. No widely spread or largely fatal disease known to have occurred among domestic animals in the town during the year.
- 4. No work for the promotion of public health has been contemplated by the authorities of the town.
- 7. No action in abatement of nuisances or improvement otherwise of a public character.
  - 8. No legal board of health beside the town council.
  - 9. No health officers appointed in this town.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

L. HOWARD.

### GLOCESTER.

- 1. No disease has prevailed largely in this town during the last year.
- 3. No widely spread disease occurred among domestic animals during the year.
- 4. No work for the promotion of public health has been contemplated by the authorities of the town.
  - 6. No public sewers.
  - 7. No sanitary improvements made by town authorities.
  - 8. No legal board of health beside the town council.
  - 9. Richard Barnes, health officer.
- 10. Gratuitous vaccination has been provided in this town during the past year.

C. W. FARNUM.

#### JOHNSTON.

- 1. Do not know of any very fatal or very serious disease that has prevailed largely in this town.
  - 2. No small pox during the last year.
  - 3. No largely fatal disease occurred among domestic animals.
- 4. Some work for the promotion of public health by abatement of nuisances under Chapter 6 of the town ordinances. (See appendix to this return.)
- 5. Pawtuxet water was introduced several years since, and is generally used by nearly all the families in the compact portion of the town.
- 6. We have no sewers with the exception of one short section running from near the junction of Plainfield and Hartford streets, and emptying into the Woonasquatucket river, constructed of stone, and I believe has no connections with private drains.
- 7. I believe the ordinance relative to nuisances has been successfully enforced in all cases that have come to the knowledge of the health officers for that purpose appointed.
- 8. This town has no organized board of health other than the council and the officers named below.
- 9. Health officers appointed by the town council: Chas. A. Barnard, M. D., Christian G. Kranich, Benj. F. Evans,
  - 10. Gratuitous vaccination has not been provided during the past year.

W. F. KING.

# ORDINANCES OF THE TOWN OF JOHNSTON. - CHAPTER VI.

### CONCERNING NUISANCES.

SECTION 1. No person, not a resident of this town shall keep, or suffer or cause to be kept, any hog or hogs in the compact part of said town.

- SEC. 2. No person, a resident of this town, shall keep any hog or hogs, in the compact part of this town, unless the same are kept in such manner, that the inhabitants of the neighborhood are not annoyed by the odor arising therefrom.
- SEC. 3. No person shall suffer his or her fowls, of any kind, to go at large off of his or her premises, within the compact part of this town. Any person who shall violate the provisions of this or the two preceding sections shall be fined not less than two dollars, nor more than twenty dollars, for each and every offence.
- Sec. 4. Any person who shall remove or in any way carry, except in air tight tubs, the contents of any sink, cesspool, privy, slaughter house offal or other offensive matter within or through any public street or highway, in the compact part of this town, between the first day of May and the first day of November, in each year, after sunrise in the morning and before sunset in the evening; or any person who shall at any time remove or carry the contents of any sink, cesspool, privy, slaughter house offal or other offensive matter in any vessel whatever, unless said vessel is so constructed as not to scatter or leak the contents, shall be fined not less than three dollars nor more than twenty dollars.
- Sec. 5. Any person or persons (except a farmer or his agents for his own use,) who shall bring or cause to be brought into the town of Johnston any part of the contents of any privy vault, cesspool, or slaughter house offal or other offensive matter, without first obtaining a license from the town council for that purpose, shall be fined not to exceed twenty dollars and be imprisoned not to exceed ten days.
- Sec. 6. Any person or persons who shall bring or cause to be brought into this town any part of the contents of any privy vault, cesspool, or slaughter house offal or other offensive matter, in any cart, wagon, or other vehicle and deposit the same in any place where it may impair health or by offensive odors annoy persons within their dwelling or while travelling on any of the public streets or highways in the compact part of this town, shall be fined twenty dollars or be imprisoned for the term of ten days, and his license shall be revoked.
- SEC. 7. When any person shall make complaint to any police officer or police constable of this town, or when any such police officer or police constable shall discover upon any premises in this town, any offal, or vegetable or animal matter, in a state of decomposition, or the contents of any barn, cow-yard, manure heap, hog-pen, hen-pen, privy, sink or other drain, cesspool or vault, noisome or injurious to the health of the neighborhood, it shall be the duty of such police officer to notify a health officer of this town of the same, who shall examine the premises, and if, in his opinion, the same is injurious to the health of the neighborhood, said health officer shall cause the party maintaining the same to be notified in writing of the existence of such nuisance, and that said owner or occupant must forthwith remove or abate such nuisance. If any such nuisance shall not be removed or abated within twenty-four hours after such notice, said owner or occupant shall for each and every day such nuisance shall remain, pay a fine of not less than two dollars nor more than twenty dollars.
- SEC. 8. It shall be the duty of every health officer of this town to examine into the condition of every place and part of said town where said officers shall suspect or be informed that there exists any matter or thing which is or may become noisome, or is or may become injurious to the health of the inhabitants of said town. Whenever it shall appear to the satisfaction of any health officer that

there exists upon any premises, any dirt, offal, animal or vegetable matter, or contents of any hog-pen, cow-yard, barn, privy, drain or vault, noisome or injurious to the health of the people of, or living in the vicinity thereof, it shall be the duty of such health officer to cause the owner or occupant of such premises to be notified in writing of the existence of such nuisance or annoyance, and to direct such owner or occupant forthwith to remove or abate the same.

- Sec. 9. Any person who shall have any horse, ox, mule, cow, bull, sheep, dog, or any other large animal die in this town, or who shall bring or cause to be brought into said town the dead body of any of the aforesaid animals, shall bury or cause the same to be buried within twenty-four hours after the death of such animal, so that every part of said animal shall be at least three feet below the surface of the ground where such animal shall be buried. Any person who shall violate the provisions of this chapter shall be fined not less than five dollars nor more than twenty dollars, or be imprisoned not exceeding ten days.
- Sec. 10. Whenever any person or persons shall establish or maintain any soap works or other place for the boiling of fat, bones or refuse matter of any kind, or shall allow the same to be established and maintained in the compact part of this town without a license first had and obtained for the same from the town council, said person or persons shall be fined a sum of twenty dollars for each and every offence, and for each and every day such nuisance shall remain after notice, said person or persons shall pay a sum of not less than two dollars or more than twenty dollars per day for each day it shall remain thereafter.

### LINCOLN.

- 1. There has not been, within my knowledge, any disease that has prevailed largely in this town during the last year.
  - 3. No largely fatal disease among domestic animals within my knowledge.
- 4. No work for the promotion of public health has been contemplated, commenced or completed in this town by the authorities of the town during the year, except as stated below.
- 5. Abbott Run water, purchased from the town of Pawtucket; three-quarters of the population supplied.
- 6. No sewers except one, and that carries surface water only to Blackstone river.
- 7. Nuisances have been generally abated, and improvements in buildings, and in some localities sanitary improvements. (See town ordinance below.)
  - 8. No legal board of health beside the town council.
- 9. Health officers, responsible to town council, have been appointed as follows: Samuel L. Pendergrass, Frank Millett, Simon A. Sayles, Nathaniel Spaulding, Andrew J. Patt and William B. Monroe.
- 10. No gratuitous vaccination has been provided in the town during the past year.

W. H. GOODING.

## TOWN ORDINANCE.

It is ordained by the Town Council of the town of Lincoln as follows:

Section 1. Any person causing or suffering filthy water to collect on his premises, or premises occupied by him, so as to be prejudicial to health, or causing or suffering the same to run into any public street or highway in this town, and not remedying the same within twenty-four hours after notice from any health officer, or who shall remove or in any way carry the contents of any sink, cesspool or privy in or through any of said streets or highways, between the first day of May and the first day of November in each year, after the time of daylight in the morning, or before nine of the clock in the evening, or at any time remove or carry the contents of any sink, cesspool or privy in any vessel whatever, unless said vessel is so constructed as not to scatter or leak the contents, shall be fined not less than three dollars nor more than five dollars.

SEC. 2. It shall be the duty of every health officer of this town to examine into the state and condition of every place and part of said town, where such officer shall suspect or be informed that there exists any matter or thing which is or may become injurious to the health of the inhabitants thereof.

SEC. 3. Whenever it shall appear to the satisfaction of any health officer that there exists upon any premises owned or occupied by any person or persons, any filth or offal, or any animal or vegetable matter, or the contents of any hog-pen, cow-yard, barn, privy, drain, cesspool or vault, injurious to health or to the neighborhood, it shall be the duty of such health officer to cause the owner or occupant of such premises to be notified in writing of the existence of such nuisance or annoyance, and to direct such owners or occupants forthwith to remove or abate the same; and if such nuisance or annoyance shall not be abated within twenty-four hours after such notice shall have been received, such owner or owners, occupant or occupants, shall, for each and every day they shall suffer such nuisance or annoyance to remain after the notice aforesaid, be sentenced to pay a fine of not less than five dollars nor more than twenty dollars.

SEC. 4. If such nuisance or annoyance shall not be abated by the owners or occupants of the premises where such nuisance or annoyance exists, at or before the expiration of the notice mentioned in the next preceding section of this ordinance, and if in the opinion of such health officer the expense of abating the same will not exceed the sum of ten dollars, then it shall be the duty of such health officer to authorize in writing the sheriff of this county, his deputies, or the town sergeant or either of the constables or police constables of this town, forthwith to cause such nuisance or annoyance to be abated. And the town council shall order the expenses thereof, not exceeding ten dollars, to be paid out of the town treasury of said town to the officer abating the same, which said expenses, so paid as aforesaid, shall be recovered from the party causing or continuing said nuisance or annoyance, in an action of debt in the name of the town treasurer of said town, before any court of competent jurisdiction.

SEC. 5. Whenever it shall appear to the satisfaction of any health officer that there exists upon the premises owned or occupied by any person or persons any matter or thing injurious to the health of the inhabitants of any part of the town, or which, in his judgment, may originate or conduce to the spreading of any infectious or contagious disease, and that the expense of abating such nui-

sance or other cause dangerous to health shall be estimated at more than ten dollars, it shall be the duty of such health officer, as soon as the exigency of the case shall reasonably require, to report the same in writing to the town council, setting forth the particulars of such nuisance and the probable expense of removing the same, as nearly as may be, and the owner or occupant of the premises upon which such nuisance or nuisances exists, or the person who may have caused, continued or permitted the said nuisance or nuisances, shall be forthwith notified to appear before the town council, at such time as the council shall appoint, to show cause if any, why said nuisance shall not be abated or removed. And said council, upon satisfactory evidence to them submitted that said nuisance exists, may order the sheriff of this county, his deputies or the town sergeant or either of the constables or police constables of this town, forthwith to abate the same, and the expenses thereof shall be paid out of the town treasury, and be recovered from the party causing or continuing the same, in the same manner as prescribed in the next preceding section of this ordinance.

SEC. 6. Whenever, in the opinion of any health officer of said town, any privy vault, sink, sink-drain, sink-spout, cesspool, or the outlets thereof, are so constructed or located upon any premises as to be prejudicial to the public health, such officer shall give notice in writing to the owner or owners, or person or persons having the care of such premises, that such privy vault, sink, sink-drain, sink-spout, cesspool, or the outlets thereof are prejudicial to the public health, and that the same must be reconstructed or removed within twenty-four hours after the notice is received. Any person not complying with the provisions of such notice shall be fined twenty dollars.

### PAWTUCKET.

- 1. No disease largely fatal was unusually prevalent.
- 3. No wide spread disease among domestic animals.
- 4. Sewers have been extended, and plans for a system of sewers have been approved, (see under question 6,) the water supply has also been extended, and a new station with additional power for pumping added, with which is connected a filter gallery and bed, of somewhat novel construction, and serving its purpose very effectually. (See question No. 5.)
- 5. The Water Commissioners report that the pumping apparatus and other arrangements at the new station have been fairly tried and that the results far exceeds their expectations, that the Lonsdale Co. have laid mains from Lonsdale to Berkeley, and the citizens of that village are now enjoying the luxury of pure Happy Hollow water, and in the early spring the main is to be extended to Ashton, which place seems to be the terminus for our mains at the north.

Service mains have been extended in many localities of the works, and nearly 400 service connections have been made. (See Superintendent's report.)

The entire works are apparently in good condition, and have received proper care and attention.

The calls for the extension of mains to supply parties with water have been so numerous that the appropriation made was insufficient to enable us to supply many with the healthful beverage who desire it.

That there is a demand for the laying of pipes in the sparsely settled streets on the outer borders of the town cannot be denied, but the revenue has not warranted the recommendation of an appropriation for the same, yet the parties on the lines think, as the works are self-sustaining, that the town can consistently grant their request. While this is a case that will require a large expenditure, we feel that it should be fairly stated in open town meeting, and then let the taxpayers judge for themselves, and if deemed advisable make a special appropriation for the same, cutside the regular appropriation for service pipe, labor, &c.

The water supply to the present time has been equal to the demand, but the drouth of the past season has warned us that at no distant day the town will be compelled to make some arrangement whereby our water supply will be permanently increased during the summer months.

From the Superintendent's report the following extracts will be of general interest:

He says, the source of supply has received more than usual care and attention. By the removal of bushes and debris from the shore the water is better preserved and freer from impurities. The capacity of the supply was severely tested during the drouth, but proved equal to the demand.

### STATION NUMBER TWO.

This is in close connection with the source of supply, and has been completed during the year.

The building is of brick, plain but of good proportions and substantial. On entering the door, on the right, the water wheels are operated. These wheels, one of 58 horse power, the other of 70 horse power, are so arranged that either one or both can be used when a sufficient amount of water is passing over the dam, and it is expected that during six months at least in the year one or both can be run, pumping from 500,000 to 1,750,000 gallons daily, according to the power supplied by the water. The wheels and pumps are connected by cut gears that are thrown in and out at pleasure by means of a handscrew, rendering it practical to utilize just what water would otherwise run to waste. In the duty performed by the wheels our highest anticipations are more than realized, as while we only expected they could pump one and three-quarter million gallons at the best, we find with one pump disconnected they maintain a uniform 40 stroke per minute of the pumps, and deliver very near two million gallons every twenty-four hours when the state of the water will permit their use.

On the left, as one enters the building, is the filter gallery, covering 460 square feet of surface. The water enters at the bottom, passing under the filter-bed, which consists of two feet of stones, the largest and bottom layer of which are about the size of an egg; and it was filled in with layers of about six inches each, each layer of a smaller size until the top presents a layer of pea gravel, the whole resting on railroad iron and boards set edgewise.

The water, after passing through this filtering material, passes through a gate into the pump-well, to supply the pumps, and it is also so arranged that it passes to another well and through the conduit line to the lower station, thereby filtering all the water pumped for the works.

Here, too, are we happily disappointed in accomplishing more than was expected. While we expected an improvement over the screens that were in use that would prevent particles and even fish-spawn that could easily pass the screens, from entering the pumps and pipes, we are more than pleased to know that silt that could not be detected with the eye is effectually removed from the water; as many of our citizens and others can testify, who have visited the station and seen the operation of cleaning the filter.

#### SEWERS.

- 6. The council have devoted much attention to this important subject, having consulted eminent sanitary engineers and recent authorities. As a result the council are unanimously of the opinion that the public interest requires the immediate sewerage of the town upon what is known as the separate system as being better and less expensive than the combined system. In addition to the original survey of the town, completed plans with profile drawings of nearly all our streets have been furnished by Col. George E. Waring, Jr., of Newport, who after having examined the topography of the town has also furnished us with much valuable information relating to sewers. Col. Waring's plans are under consideration, and presumably will in their main features be adopted by the council. The estimated cost of the sewers is such as to permit a material reduction in the rate of assessment. In that part of Weeden street paved with blocks a sewer was first laid to accord with the general system. We believe residents of our own town are capable of building our sewers economically and well.
  - 8. There is no legal board of health beside the town council.
- 9. The health officers in this town are George H. Stanley, M. D., John Brierly, Seabury S. Tompkins and Edward Card.
  - 10. Gratuitous vaccination has been provided in this town during the year.

## NORTH PROVIDENCE.

- 1. No very serious disease has prevailed largely in the town during the last year, to my knowledge.
  - 3. No disease occurred among domestic animals during the year.
- 4. No work has been done for the promotion of public health by the authorities of the town during the year.
  - 5. No introduction of water for general use.
  - 6. No public sewers.
  - 7. No order for the abatement of nuisances or other improvements.
  - 8. No legal board of health beside the town council.
  - 9. No health officers appointed in this town.
  - 10. No gratuitous vaccination has been provided in the town during the year.

The following ordinance has been adopted:

It is ordained by the Town Council of the town of North Providence as follows:

Section 1. Whenever any death shall occur in the town of North Providence it shall be the duty of the undertaker, or the person who has charge of the burial or removal of the body of the decedent to obtain Before Burial or removal of the physician's certificate (if a physician was in attendance) of the name, date and cause of death; and said physician shall exercise due courtesy and diligence in furnishing said certificate; and if no physician was in attendance, then to obtain from such sources as shall seem most reliable, the cause of death, and with the same, all the facts required by law in the Public Statutes (Chapter 85, Section 3,) as shown in the blank returns of death, and make or present the said returns to the town clerk of the said town.

SEC. 2. It shall be the duty of the town clerk upon the presentation or return of a death in accordance with law, and to his satisfaction, to issue to said undertaker or other person a permit or certificate of permission to bury, entomb, or remove the body of said deceased person without the limits of the town.

Sec. 3. Any person engaged or concerned in the burial, entombment or removal from the town, of the body of a deceased person without a permit, or knowingly violating any of the provisions of the preceding sections, shall be fined not less than one dollar, nor more than twenty dollars.

T. H. ANGELL.

### NORTH SMITHFIELD.

- 1. Do not know of any disease that has prevailed largely in this town during the last year.
  - 3. No largely fatal disease occurred among domestic animals.
- 4. There has been a *moderate* improvement in the sanitary condition of the villages in this town.
  - 5. No introduction of water for general use.
  - 6. No public sewers.
  - 8. No legal board of health beside the town council.
  - 9. No health officers appointed in this town.
  - 10. No gratuitous vaccination provided during the past year.

B. A. Andrews.

### PROVIDENCE CITY.

- 1. Providence was unusually exempt from long and large prevalence of the most serious kinds of disease during 1883. Typhoid fever had two or three short periods of considerable prevalence, and pneumonia was quite rife in the spring months.
- 4. A very great interest has been manifested by a large proportion of the citizens of the city during the year 1883, in questions appertaining to the means of preserving general health. At no previous time has public attention been so largely directed to sanitary inquiry. The questions of supply of pure water for

domestic use, the pollution of the waters of the rivers and the central cove, the extension of sewerage, the condition of the public buildings, and especially the public school buildings, have all had popular attention, and also have been subjects of official action.

A special sub-committee, of the Providence Public School Committee, made a very thorough examination of the school buildings of the city, not only in relation to accommodation and structural condition, but also in relation to their sanitary condition, in-doors and out-doors. While most of the newer structures were in a fair sanitary condition, there were found many in a very poor condition, in regard to healthful heating, ventilation and means of exit in case of fire, of which large danger existed because of proximity of furnaces and flues to wood-work, which had become almost like tinder, from long continued heating. There were also some in which the water-closet arrangements and drainage were so defective as to largely endanger the health of the pupils in attendance.

The conditions of the school buildings, as ascertained by report of the special committee, were a great surprise to almost the entire mass of the citizens of the city. Improvements in the condition of these buildings have been and will continue to be made. Special reports and extracts from addresses will be made farther on in reply to other questions.

6. The following extracts from the retiring address of Hon. William S. Hayward, Mayor, will give a succinct account of proceedings in relation to water supply and extension of sewers:

### WATER WORKS.

The opinion has seemed to prevail for some time past with many citizens, that the Pawtuxet water had in some way deteriorated, since its first introduction into the city mains, and the question of its purity has received during the past year, more than usual attention on the part of private citizens and the public press. By some it was asserted that the city authorities were either indifferent to or ignorant of the actual condition of the water, and that adequate efforts had not been made, to remove impurities from the mains and to prevent the pollution of its source. Careful analyses of the water, taken from different parts of the distribution pipes and the river itself, which have been made by Prof. John H. Appleton, of Brown University, at intervals of two weeks for nearly eight years, and submitted to the city engineer, show that the alarm felt on account of its alleged condition, is not justified by the facts, and the comprehensive report made by that gentleman to the board of public works in September last, embracing the results of his investigations, has, I believe, reassured our citizens, and shown "that there is no distinct ground for decided complaint of its quality, nor for fear with regard to its use." While such is the case, it is undoubtedly true that there have existed, and still exist, sources of defilement on the Pawtuxet. To this the city authorities have not been indifferent; but have given the subject careful attention, and for many months have been quietly prosecuting what seemed the most effective method of removing this cause for apprehension, and have strong reasons to believe that, as a result of recent negotiations, the accomplishment of this object will speedily be attained.

The water has recently been drawn off from both the Sockanosset and Hope

reservoirs, revealing a surprisingly small quantity of sediment deposited upon their beds, which have been thoroughly cleansed.

November 17, last, the city purchased for \$7,000.00 the pipes and franchises of the Pawtuxet water pipe company, which originally cost the company \$10,000.00.

The total length of water pipes of all sizes laid, since the water works were commenced, is 175.01 miles, of which 7.59 miles were laid during the past year, and 19.71 miles since January 1, 1881.

The average daily consumption of water in gallons during the summer months of the last six years is as follows:

1878.	1879.	1880.	1881.	1882.	1883.
3.295.000.	3.596.000	4.385,000	4.109.628	4.610.000	5.024.000

The largest amount of water consumed in one day during the past year was 7,044,000 gallons.

The total net cost to the city for the construction and maintenance of the water works may be seen from the following exhibit of the receipts and expenditures for the same from February, 1872, to September 30, 1883:

Expended for maintenance.       \$679,219 93         Expended for construction       5,257,348 89         Expended for interest, premium and discount.       3,206,110 63	
Total	
Total	\$2,741,647 39
Total net cost	\$6,401,032 06

A large storage reservoir has recently been constructed at Poneganset, in Scituate, having a capacity of six hundred million gallons, for supplying the mills on the Pawtuxet river during the dry season. In view of the evident advantage to be derived by the city from such a reservoir, in the large increase in the water supply during a drought, as well as the greater purity of the water which will naturally result from the increased volume and rapidity of the current, occasioned by the daily discharge of a portion of its contents, the sum of twenty-five hundred dollars was paid, under authority of the city council, towards clearing the bed from underbrush and other vegetable substances, which might injure the quality of the water.

## SEWERS.

There have been  $2\frac{1}{100}$  miles of sewers built during the past year, making the total length constructed under the present system  $47\frac{9}{100}$  miles.

The final disposition of the sewage of the city of Providence is a matter of such magnitude, and will involve the expenditure of so vast an amount of money, that the mistake of adopting ill-conceived or defective plans for its accomplish-

ment, would be an unpardonable error and one which the city cannot afford to make. A series of valuable and comprehensive experiments have been conducted by the city engineer day and night for several months past and are still in progress, with a view to determining the effect of the direction, velocity and character of the tidal currents in the Providence river and upper portions of Narragansett bay upon the final lodgment and disposition of the city sewage, should it be discharged into tide water below Field's point, as was originally contemplated, and for the purpose of ascertaining how far a consideration of these elements must enter into the solution of that most important problem. To reach a valid and satisfactory conclusion in reference to that part of this question, it is obviously necessary, that these experiments should be continued, until they embrace in their results full and complete sources of information as to the probable effect of the prevailing winds and currents at all seasons of the year.

In compliance with a resolution of the city council, approved September 15, 1882, the city engineer has been for more than a year busily engaged in the preparation of plans for completing the sewer system of various sections of the city and in the study of the methods, employed in this country and abroad for the final disposition of sewage. In this work he has not only consulted the highest authorities upon the subject, but has also had the personal assistance of some of the most prominent engineers of the country.

In this connection a report of the committee on city engineer's department, presented to the city council December 17th, last, embodying the conclusions derived from the careful investigations of the committee into the sources of the defilement of the rivers emptying into the cove basin and their contribution to the frequently offensive condition of the waters in the centre of the city, raises the question as to what can and ought to be done to prevent the continuance of this nuisance. The amount of the pollution poured into these rivers, before reaching the cove, is very great, and it is not unreasonable to believe, that by proper legislation and arrangements with the manufacturers upon them, whereby these sources may be removed, the condition of the water of the cove and outlet will be greatly improved, if not rendered wholly inoffensive.

7. The following extract from the inaugural address of Hon. Thomas A. Doyle, Mayor, is pertinent in relation to the great nuisance of the city:

## THE COVE BASIN AND PROVIDENCE RIVER.

For several years the buildings in certain sections of the city have been filled at times with a disagreeable odor which has increased in intensity from year to year, until during the last summer and fall it was so sickening in certain states of the atmosphere during the night time, as to create grave apprehensions of an outbreak of disease. This odor was generally attributed to the cove basin by the great majority of the citizens, but by others to the condition of Providence river between the cove basin and the Crawford street bridge, while still others assigned to it entirely different causes. Whatever the disagreement may be as to the cause there is but one opinion in regard to the necessity for its abatement at the earliest possible moment, no matter what expense it may be to the public treasury. The efficient superintendent of health, Dr. Snow, has not been unmindful of his duty in the premises, and from time to time since July, 1876, has brought

the matter to the attention of the board of health, which is the board of aldermen, in reports urging immediate action because of danger to the public health. These, however, received but slight attention from that body.

The city council by resolution, approved September 15, 1882, directed the city engineer "to report plans of the main intercepting sewers, and of any other works necessary for collecting, conducting and disposing of the sewage of this city in accordance with the best approved methods at such a point and in such a manner as will be the least injurious to public health, together with estimated cost thereof."

This action of the city council was in the direction of providing a remedy for a removal of the disagreeable odor, which was generally believed to be attributable to the want of a proper and thorough system of sewers. In May last, the board of trade at its regular monthly meeting declared that in view of the present state of the waters of Providence river and cove basin, the board deemed it essential, "for the preservation of the health of our city, that immediate steps should be taken to provide a better system of sewerage."

The board also directed its president "to prepare a memorial for the signature of the tax payers of the city to be presented to the city council." This memorial was duly prepared and signed by a number of citizens, and with the resolution of the board was forwarded to the mayor who transmitted them to the city council in a special message on the 18th of June following. The message and accompanying documents, although addressed by the mayor to the city council, did not reach the board of aldermen, as the common council made a reference of them to the committee on the city engineer's department, of which committee the mayor is chairman. The committee promptly took action in the premises and proceeded to make a careful and thorough investigation of the condition of the cove basin, the rivers flowing into it and the Providence river between the cove basin and the south line of Crawford street bridge, and in so doing called to their assistance the services of Dr. Snow, the superintendent of health, S. M. Gray, the city engineer, and Prof. Appleton, of Brown University. The result of the labors of the committee was presented to the city council and received by both bodies on the 17th of last month, and at their closing session during the past week the resolution appended to the report of the committee was adopted.

An examination of this report shows a condition of things which may well be deemed alarming, when it is considered that months and probably years must elapse before the citizens of Providence can be relieved from the nauseous stench which has filled their homes so often and for so long a period, and a return of which with increased power they may expect with the approach of warm weather. It is also a severe comment on the intelligence of the community which has permitted the powers of the board of health to be vested ex-officio in the board of aldermen, the members of which have duties enough to perform without this unusual and improper increase thereof.

The report also affords convincing proof that the sewage flowing into the cove basin is not the sole cause of offence, neither is it the condition of the Providence river, but both of these combined with the filthy state of the waters of the Moshassuck, Woonasquatucket and West rivers, all of which flow through the cove basin. Upon this point the committee say "the objectionable condition of the waters of the cove basin and Providence river arises from the filth that is

allowed to flow into and pollute them. This filth, as we have shown, flows in abundant streams from the West river, the Moshassuck river and the Woonas-quatucket river." The committee add, "if the city government shall insist that these rivers shall be allowed to flow into and through the city in a clear and pure condition and shall take such steps as will procure this end a most valuable result will be secured."

The committee speak of the defilement of the rivers by the large manufacturing establishments, and believe that the city has "clearly the right to demand of these corporations that they shall not pollute the waters flowing within the city limits to the cove basin and thence to the Providence river." The committee are convinced that it is possible for these large concerns to purify by filtration or otherwise their foul liquors and that "it is merely a question of cost." The conclusions arrived at by the committee are that measures must be taken to prevent the pollution of the rivers flowing into the city, and to this end authority must be sought from the general assembly, if requisite, and that the construction of the large marginal or intercepting sewers must be at once entered upon, as in any plan for the final disposition of the sewage their construction will be necessary.

No more important report nor one presenting more serious questions in regard to the future health and well-being of this city has been before submitted to the city council than this one upon the "pollution of the tributaries of the Providence river," and it should receive deliberate and prompt attention.

The construction of the great marginal or intercepting sewers, which, it appears, will have to be built, involves the expenditure of millions, and before the work is entered upon there are certain matters to be decided by the city council. By far the most important of these is the final disposal of the sewage. What shall be done with it is a question which at the present time no one is prepared to answer satisfactorily. The examinations and experiments made by the city engineer render it certain that it cannot with safety be emptied into Narragansett bay at or near Field's point in its crude state, and he has grave doubts whether it could be done at a point as near the city as Conimicut point. If this be so, and it seems probable that his doubts will be confirmed, then it is indeed a question of the gravest importance to decide. To turn the sewage into the bay at Field's point, or even at Conimicut point, renders certain the destruction not only of the fish but also the oyster beds and in all probability the other shell fish, from which so large a revenue is derived annually and for which the shores of Rhode Island are famous. That such a disposal of the sewage would be prohibited by the general assembly there is no question, and the expense of conveying it a sufficient distance down the bay, to prevent unfavorable results therefrom, involves an expenditure too large to be undertaken by the present population, while the annual interest and the payment to the sinking fund on the bonds issued for the increased expenditure would, in all probability, more than pay the expense of treating the sewage. In this condition of the question we naturally turn to the cities of the old world where similar questions have been considered, and where in some of them it is reported the utilization of sewage has been satisfactorily accomplished. All other matters in relation to the subject of sewers can be settled by the engineering talent already available to the city. It is very important, nay, absolutely necessary that before any plans

are definitely decided, the city council should send a commission abroad to investigate thoroughly the question of the utilization of sewage and the best method of doing it. The expense of such a commission would be of slight importance, when the large expenditure required for the construction of the system of sewers is taken in to the account. Such a commission should not consist of more than three persons, and the city council may very properly decide that one will be sufficient. In that case the city engineer should be the person to be selected, and, if more than one is sent, he should be accompanied by persons already familiar with the questions to be investigated, who by their scientific attainments and studies are eminently qualified for such a position.

Should it be decided to send a commission abroad, the members thereof should leave for their destination as early as possible in the ensuing month, in order that they may reach the northern portion of Germany during the cold weather, where it is understood there are works for the utilization of sewage now in successful operation. While this commission is absent, which would probably be for a period not exceeding three months, there are other matters in connection with this subject, which were recommended by the committee, that could be pressed to completion, and in which the co-operation of the city council will be necessary. These are the procuring of the necessary legislation from the general assembly at the ensuing session, the removal of the causes of impurity from the rivers within the city limits and obtaining the co-operation of the authorities of adjoining towns in the same work so far as necessary.

The city engineer has reported lines and locations for all the great marginal and intercepting sewers except those for the Woonasquatucket valley and the valley of the Seekonk, and it is expected that these will be completed in time to be reported to the city council early in the next month. When this is done there will in all probability be the right of way to be secured for the locations of these sewers, and proceedings for that purpose will have to be commenced at an early date.

All this legislation will require active work on the part of the members of both branches of the city council and frequent meetings. The time has passed when delay will be longer tolerated or suffered by the citizens of Providence. The excellent report of the engineering committee has stated the facts and shown where the evils exist, and it remains only for the city council to remove them, and by a little extra effort on the part of the members it will be accomplished. I invite your earnest and hearty co-operation in this great and important work.

- 8. There is no legal board of health in the city of Providence except the board of aldermen.
  - 9. Dr. Edwin M. Snow, Superintendent of Health.
- 10. Gratuitous vaccination is furnished every Saturday during about ten months in the year.

#### SCITUATE.

1. Have not heard of any very fatal disease that has prevailed largely in the town during the last year.

- 3. Do not know of any disease among domestic animals during the year.
- 4. No work done for the promotion of public health by the authorities of the town during the year.
  - 6. There are no public sewers.
- 7. Nothing has been done in the way of abatement of nuisances or other improvement.
  - 8. No legal board of health beside the town council.
  - 9. No health officers appointed by the town council.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

An ordinance has been adopted as follows:

# TOWN ORDINANCE.

It is ordained by the Town Council of the town of Scituate as follows:

- Section 1. Whenever any death shall occur in the town of Scituate it shall be the duty of the undertaker, or the person who has charge of the burial or removal of the body of the decedent to obtain Before Burial or removal of the same, the physician's certificate (if a physician was in attendance) of the name, date and cause of death; and said physician shall exercise due courtesy and diligence in furnishing said certificate; and if no physician was in attendance, then to obtain from such sources as shall seem most reliable, the cause of death, and with the same, all the facts required by law in the Public Statutes (Chapter 85, Section 3,) as shown in the blank returns of death, and make or present the said returns to the town clerk of the said town.
- Sec. 2. It shall be the duty of the town clerk upon the presentation or return of a death in accordance with law, and to his satisfaction, to issue to said undertaker or other person a permit or certificate of permission to bury, entomb, or remove the body of said deceased person without the limits of the town.
- Sec. 3. Any person engaged or concerned in the burial, entombment or removal from the town, of the body of a deceased person without a permit, or knowingly violating any of the provisions of the preceding sections, shall be fined not less than one dollar, nor more than twenty dollars.

D. C. REMINGTON.

#### WOONSOCKET.

- 1. I cannot learn that any such disease has prevailed.
- 3. I have made inquiries of various persons likely to know if any diseases of domestic animals have prevailed, and they all say that the town has been very free from such the past year.
- 4. No work for the promotion of public health has been contemplated by the authorities of the town during the year, unless the introduction of water be so considered.
- 5. Water has not been introduced, but negotiations with that purpose in view have been in progress.

- 7. None, except an ordinance in amendment of previous ordinance relating to cesspools, privies, &c., passed March 6, 1883; probably fairly enforced.
  - 8. No legal board of health beside the town council.
- 9. Health officers: Dr. William C. Monroe, Gilbert L. Staples and Godfroy Daigneault.
- 10. Gratuitous vaccination has not been provided in this town during the past year.

A. E. GREENE.

The following is the ordinance alluded to at question 7:

# TOWN ORDINANCE.—CHAPTER 47.

It is ordained by the Town Council of the town of Woonsocket as follows:

Section 1. Section 2 of Chapter 27 of "An ordinance comprising the ordinances of the town of Woonsocket," and entitled "Sinks, cesspools and privy vaults," is hereby amended so as to read as follows:

- SEC. 2. No person or persons shall, between the fifteenth day of May and the fifteenth day of October in any year, carry into or through any such public street or highway, any part of the contents of any sink, cesspool or privy vault, in any cart, wagon or other vehicle whatever, except between the hours of eleven o'clock in the evening and sunrise, nor unless the same shall be removed by means of an air-tight apparatus and in such a manner as shall prevent entirely the escape of any noxious or offensive odor therefrom.
- SEC. 2. Section 3 of said Chapter 27 is hereby amended so as to read as follows:
- SEC. 3. From the fifteenth day of May until the fifteenth day of October in each year, no person shall remove any portion of the contents of any sink, cesspool or privy vault therefrom, unless such contents are previously disinfected, so that the removal thereof will cause no offensive odor; and every owner, occupant, agent or other person having charge of the land on which any privy vault, sink or cesspool is located, shall from time to time disinfect the contents thereof, and keep such privy vault, sink or cesspool free from all offensive odors.
  - SEC. 3. This ordinance shall take effect from and after its passage.

The foregoing ordinance was passed by the town council of the town of Woonsocket, March 6, 1883.

Attest:

ALBERT E. GREENE, Council Clerk.

# WASHINGTON COUNTY.

#### CHARLESTOWN.

- 1. No diseases fatal or very serious have prevailed to an unusually large extent in this town during the last year.
  - 2. No cases of small pox during the last year.
  - 3. No disease has occurred among domestic animals during the year.

- 4. No work has been done for the promotion of public health by the authorities of the town during the year.
  - 7. No act in abatement of nuisances.
  - 8. No legal board of health beside the town council.
  - 9. No health officers in the town.
- 10. No gratuitous vaccination has been provided in the town during the past year.

G. C. Cross.

# EXETER.

- 1. No very serious disease has prevailed largely in this town during the last year.
  - 3. No largely fatal disease occurred among domestic animals.
- 4. No work for the promotion of public health has been contemplated by the authorities of the town.
- 7. No abatement of nuisances or improvement in heating or ventilating public buildings, halls, school houses, &c.
  - 8. No legal board of health beside the town council.
  - 9. No health officers in this town.
  - No gratuitous vaccination has been provided in the town during the year-N. B. Lewis.

# HOPKINTON.

- 1. No very fatal disease has prevailed largely during the last year.
- 3. No largely fatal disease occurred among domestic animals during the year.
- 4. No work for the promotion of public health has been contemplated by the authorities of the town during the year.
  - 7. No abatement of nuisances or other improvement for public health.
  - 8. No legal board of health beside the town council.
  - 9. No health officers.
  - 10. No gratuitous vaccination has been provided in this town during the year.

E. R. ALLEN.

#### NORTH KINGSTOWN.

- 1. No very fatal disease has prevailed largely in this town during the last year, that I know of.
  - 2. No cases of small pox in this town during the last year.
  - 3. No largely fatal disease occurred among domestic animals.
- 4. Not any work for the promotion of public health has been contemplated by the authorities of the town during the year.

- 6. No public sewers.
- 7. No abatement of nuisances by order of town council.
- 8. No legal board of health beside the town council.
- 9. No health officers appointed in this town.
- 10. No gratuitous vaccination has been provided in the town during the past year.

J. B. PEIRCE.

#### RICHMOND.

- 1. No very fatal or very serious disease has prevailed largely to my knowledge.
- 3. No largely fatal disease occurred among domestic animals.
- 4. No work for the promotion of public health has been contemplated.
- 7. No abatement of nuisances.
- 8. No legal board of health beside the town council.
- 9. No health officers in town.
- 10. No gratuitous vaccination has been provided in this town during the year.

H. P. CLARK.

#### SOUTH KINGSTOWN.

- 1. No very fatal disease has prevailed largely in this town during the last year.
- 3. No largely fatal disease occurred among domestic animals during the year.
- 4. No work for the promotion of public health except during the year the town council ordered the town vaccinated by school districts, and the hotels at Narragansett Pier were inspected by an ageut of the State Board of Health, and improvements suggested, some of which have since been carried out.
- 7. No abatement of nuisances or improvement in heating or ventilating public buildings, halls, school houses, &c.
  - 8. No legal board of health beside the town council.
  - 9. No health officers in the town appointed by the town council.
- 10. Gratuitous vaccination has been provided in this town during the past year.

J. G. PERRY.

#### WESTERLY.

- 1. No very fatal disease has prevailed largely in the town during the last year.
- 2. No cases of small pox during the year.
- 3. No largely fatal disease occurred among domestic animals within my knowledge.

- 4. No work for the promotion of public health has been contemplated, commenced or completed in the town, by the authorities of the town, during the year. Private individuals have made sanitary improvements, and the hotels at Watch Hill were inspected by the Secretary of the State Board of Health during the summer, and some changes made.
  - 5. No introduction of water for general use.
  - No sewers constructed.
- 7. No abatement of nuisances or improvement in heating or ventilating public buildings, halls, school houses, &c., or by drainage, or by compelling the removal of excrete, garbage, house refuse, &c., or for any other purpose.
  - 8. No legal board of health beside the town council.
  - 9. Benjamin York, health officer.
  - 10. No gratuitous vaccination has been provided in the town during the year.

W. HOXSEY.

# CATTLE COMMISSION.

The vigilance required to prevent the dissemination of contagious or infectious diseases among the horses, cattle and other domestic animals in the State, has been actively exercised during the year.

This duty is made imperative by the large amount of property invested in live stock, and the great pecuniary losses that would result upon the introduction and dissemination of some of the diseases prevailing in other States, liable to be brought in by cows and young stock from the north and from the west, especially no farther west than New York and New Jersey, where pleuro-pneumonia has a permanent foothold, and by importation of blooded stock from the British dominions where the foot and mouth disease is continually prevalent, and by horses affected with glanders, which prevails largely in some sections from which horses are brought to supply the Rhode Island market.

By the U. S. census of 1880, there were in the State of Rhode Island of the different kinds of live stock, the following numbers, viz.: Of horses, 9,661; of mules and asses, 46; of working oxen, 3,523; of milch cows, 21,460; other cattle, 10,601; of sheep, 17,211; of swine, 14,121.

Estimated value of horses, \$1,449,050; of other live stock, \$840,-505. Total, \$2,289,555.

The introduction of any of the more virulently contagious diseases of horned cattle, would be more rapidly disseminated in Rhode Island, unless means of restriction were immediately employed, than in many other States, because of the small size of farms, and the proximity of small herds in and near the cities and villages of the State.

#### GLANDERS.

The continual propagation of glanders from infected horses to those previously sound, goes on from year to year, because, first, the disease is unsuspected until it has become established and has been for sometime sufficiently advanced to communicate the disease to others, and during which time opportunities have occurred for such communication; and secondly, because some owners will dispose of the diseased horse as soon as they become aware of the nature of the disease, or have their suspicions aroused, and each successive owner may do likewise, until notice of the case is given the Secretary, and that during this time also opportunities for communication may occur; and thirdly, because horses infected with glanders are occasionally imported from other States.

Were it not for the last reason named, it might be possible, perhaps, to completely eradicate the disease from this State.

During the year 1883, there were fifteen horses destroyed in the State because affected with confirmed glanders. Of the fifteen, nine were found in Providence city, and one in each of the following towns: Cumberland, East Providence, Pawtucket, North Providence, Lincoln and Warwick.

There were forty-eight horses of which the Secretary was notified as suspected of having glanders, and there were made during the year one hundred and twenty-six investigations or inspections, several visits each having been made weekly or thereabouts to some of the horses, such as were isolated and kept for confirmation or discharge.

#### CONSUMPTION.

This disease is the most prolific cause of death among domestic animals, and especially of milch cows, of any having an ordinary and steady prevalence.

It is seldom that complaint is made to the Secretary of sales of milk from diseased cows, or that the Secretary is notified that a certain person is suspected of selling milk drawn from a diseased cow, in which upon investigation the disease is not found to be consumption. It is not, however, a disease of frequent occurrence in the farm dairies away from the vicinity of the cities and large villages, but is almost always found where the cows have but little range, and where when stabled they are closely huddled together in apartments not well ventilated. Uncleanliness is also usually an accompaniment. In

cases where only a single animal, or two or three are confined in a stable, the same defective ventilation and the same disregard of neatness is usually found.

It should not, however, be inferred that there is a large proportional number of such pens, or that any considerable quantity of milk from diseased cows is sold. Such is not believed to be the fact. No evidence has yet been obtained that any person has sold milk from diseased cows, having knowledge that the animals were diseased, or that the disease made the use of the milk unsafe. Milk, however, has doubtless been sometimes sold from cows in the incipient stages of consumption, and before the owner has realized that any disease affecting the quality of milk was present.

Such circumstances have oftener been found where there was only a single cow, and where only the milk not needed by the family of the owner was sold to neighboring families, and where the announcement of danger from the use of the milk was received with surprise and with not a little of incredulity.

# THE U. S. TREASURY CATTLE COMMISSION.

This Board, created by Act of Congress, was authorized and required, in 1882, to procure locations and provide shelter, care and means of subsistence in or near such ports as were points of import and debarkation, for cattle imported into this country and held in quarantine until such time as the question of the possibility of such animals having, or being the carriers of some contagious or infectious disease was definitely settled.

During 1882, two such quarantine stations were established in New England, though not fully equipped, one in the town of Deering, seven miles from Portland, in Maine, and one in the town of Waltham, a few miles from Boston, Mass.

Since then, a quarantine station for cattle imported into this country through ports in New York or New Jersey, has been located at Garfield, a station on the Erie "Short Cut" R. R., near Passaic, N. J., and also one near Baltimore, Md.

Precautions of this kind are absolutely necessary to prevent the introduction into this country of diseases among domestic animals which are common in European countries, but have fortunately never obtained large prevalence here. Such particularly are the foot and mouth disease and the rinderpest. The rinderpest, with its fatal results, has indeed never been located in the United States.

# FOOT AND MOUTH DISEASE.\*

This disease has appeared in this country from time to time, most remarkably in 1871, when it swept over the line from Canada, and was very largely prevalent in northern New York and New England, and has in every instance been propagated from imported cattle. The following extract from a report of the Treasury Cattle Commission, made during 1883, will be of interest as showing why an investigation was made, and also as giving an account of the characteristics of the disease to which public attention has been so recently and so earnestly called, and as coming also from a source entitled to so much credence and respect:

Charges having been recently made in the British Parliament that cattle were being shipped from our ports infected with foot and mouth disease, and a majority of the House of Commons having voted for a resolution opposing the importation into Great Britain of cattle from any country in which said disease exists, we feel it our duty to state the facts of the case so far as this country is concerned. After a most extended and almost exhaustive inquiry, your commission have been able to find no trace of foot and mouth disease, apart from herds just landed from Great Britain, and those herds have been in every case segregated until the infection has entirely disappeared. The nature and scope of our inquiry may be deduced from our report for 1881. Beginning with the great rendezvous of cattle at Kansas City, Council Bluffs and Omaha, we have made careful investigations along all the lines of cattle traffic as far as the eastern seaboard. In this investigation we have included all the great stock yards where cattle are detained for feeding, watering, sale, &c.; all the great feeding stables connected with distilleries and starch, glucose and other factories; all the city dairies where stockyards exist and where the herds are replenished from such stockyards, and to a large extent the great dairying districts into which cows are

<sup>\*</sup>It should be stated that the alarm manifested throughout the country lest the occurrence of this disease during the winter of 1884, in Cumberland county, in Maine, and the reported very extensive prevalence over a large territory west of the Mississippi river, should cause its extension over the whole country, was happily allayed before the article, to which this note is a reference, was sent to the press.

The disease in Maine has been entirely extirpated, and that in the west, though having many symptoms very much like the foot and mouth disease, has been pronounced by the most eminent veterinarians in the country, a gangrene of the foot, non-contagious and caused by exposure and improper modes of keeping the cattle, the disease disappearing with the advance of warmer weather.

The extremely infectious character of the disease may be shown by a statement of the causes of the occurrence in Maine. A few animals imported from England were disembarked from a vessel in Portland. They were inspected by a United States Commissioner, and so slight were the symptoms at the time of disembarkation that they failed to be sufficiently apparent to be even suspicious. They were then driven over the road to the quarantine in the town of Deering, a few miles out of the city.

The disease was spread from these cattle, by the passing of a yoke of oxen over the same road not long after, and from them communicated to others. It may be said, however, that complete isolation of affected animals will effectually control its extension,

drawn from the above-named stockyards and lines of travel. Up to the present date we have made observations in the stockyards at the seaboard, the terminal end of our cattle traffic, and that to which all infection must gravitate, but apart from the imported cases above referred to, we have been unable to find a single case of the foot and mouth disease complained of.

#### CHARACTERISTICS OF THE MALADY.

The significance of the entire absence of this disease along the whole line of our cattle traffic and in the herds into which this traffic leads, can only be appreciated when considered in its relation to the nature of the disease and the unmistakable symptoms by which it is manifested. The following points are specially to be noted:

First—The foot and mouth disease is, perhaps, the most contagious malady known. It rarely enters a herd without striking down all the members of that herd simultaneously or nearly so.

Second—The susceptibility to the disease is all but universal on the part of warm blooded animals, but all cloven footed animals are especially and about equally predisposed to it. It cannot be overlooked nor covered up, therefore, as can a disease which confines its ravages to a single genus; but sheep, goats and swine coming within the range of the infection contract and manifest the disease as readily and in as marked a way as do cattle.

Third—The period of latency or incubation is remarkably short, the eruptions of the malady often taking place in thirty-six hours and rarely being delayed, even in cold weather, beyond six days after exposure to infection. There is, therefore, no opportunity for concealment nor for the disposal of infected but still apparently sound animals, while a journey of four or six days from the west, with the attendant privations and febrile excitement, would infallibly determine the full eruption of the disease before the stock arrived at the eastern seaboard, and this although the infection had only been received after shipment on the cars.

#### NOT TO BE HIDDEN.

Fourth—The manifestation of the disease is not only so universal in the herd affected, but so prominent and unmistakable that it could not possibly be overlooked. No one could ignore for a moment the swollen digits, the lameness and the blisters or ulcers between the hoofs; the heat, tenderness, swelling and blisters or raw sores on the udder and teats and the abundant frothing and slobbering at the mouth; the frequent loud smacking noise made with the tongue and palate and the large rounded blisters or red angry sores on the mucous membrane of the mouth. These cannot escape the attention of the owners and attendants, and especially when a whole herd of ten, fifty or one hundred are suffering simultaneously. Much less can they escape the instructed eye of the professional veterinarian.

#### PLEURO-PNEUMONIA.

This disease, so frequently alluded to in the annual reports, still continues to seriously menace the prosperity of the cattle interests of the United States. So actively contagious and so fatally destructive is

its character, that once gaining a foothold in the extensive cattle ranges of the west, it would be practicably incontrollable, and sweeping States and territories, would effect a destruction of animals, in numbers incalculable and in money values enormous.

In Great Britain it is estimated that not less than \$10,000,000 is lost annually by the presence of this disease, and that in the face of vigorous and well enforced law for its suppression and the isolation which is possible there, but which would be utterly impossible west of the Mississippi river.

A convention of persons interested in cattle breeding was held in Chicago, Ill., in November, 1883, for conference, and discussion of measures having in view the arrest of the progress of the disease westward, and the complete stamping out of the disease, if possible, in places where it has already obtained permanent occupancy.

It has for many years had an established foundation in sections all along the Atlantic ocean, and for considerable distances inland, from New York city suburbs to the Chesapeake bay and the Potomac river. It is particularly from the sales stables in the vicinity of New York, where milch cows and bulls of native and blooded stock are distributed to various localities, that the danger of propagation arises.

As a result of that convention, it was shown that no effectual result could be expected of State action, and that Federal or National authority must be secured therefor, and a committee was appointed to draft a bill for Congressional action.

The Act\* recommended by that committee and placed in the hands of the House Committee on Agriculture reads as follows:

A BILL for the establishment of a bureau of animal industry for the suppression and extirpation of pleuro-pneumonia and other contagious diseases in domestic animals.

Section 1. The Commissioner of Agriculture shall organize in this department a bureau of animal industry, and appoint as chief a competent veterinary surgeon, whose duty it shall be to investigate and report the number, value and condition of domestic animals of the United States, their protection and use; also to inquire into and report the causes of contagious, communicable diseases among them, and the means of prevention and cure of the same, and collect such information on these subjects as shall be valuable to the agricultural and commercial interests of the country. The salary of the chief of the bureau shall be the same as that of other chiefs of divisions in said department. The Commissioner is also authorized to appoint a clerk of said bureau, at a salary of \$1,500 per annum.

<sup>\*</sup>The bill has since been introduced into the House of Representatives, and there is a probability that it will become a law, with some modifications of the original text.

- SEC. 2. The Commissioner of Agriculture is authorized to appoint three competent agents, who shall be practical stock raisers or experienced business men familiar with business pertaining to commercial transactions in live stock, and whose duty it shall be, under the instructions of the Commissioner of Agriculture, to report the best methods of treating, transporting, and caring for animals, the means to be adopted for the suppression and extinction of pleuro-pneumonia, and provide against the spread of other contagious diseases. The compensation of the agents shall be \$10 per diem, and all necessary expenses while engaged in the performance of duty under the act.
- SEC. 3. In order to promote the exportation of live stock from the United States, the Commissioner of Agriculture shall make a special investigation as to the existence of contagious pleuro-pneumonia, or any contagious communicable disease, along the dividing line between the United States and foreign countries, and along the lines of transportation of all parts of the United States, to ports from which live stock are exported, and make a report of the results of the investigation to the Secretary of the Treasury, who shall establish such regulations concerning the exportation and transportation of live stock as the results of said investigation shall require.
- Sec. 4. That to prevent the exportation from any port of the United States to any port of a foreign country, of live stock affected by any infectious or contagious disease, especially pleuro-pneumonia, the Secretary of the Treasury shall be authorized to adopt such measures not inconsistent with the provisions of this act as he may deem necessary.
- That it shall be the duty of the Commissioner of Agriculture to prepare such rules and regulations as he may deem necessary for the speedy and effectual suppression and extirpation of contagious pleuro-pneumonia, and certify such rules and regulations to the executive authority of each State and Territory, and invite said authority to co-operate in the enforcement of the provisions of this act. Whenever the plans and methods of the Commissioner of Agriculture shall be accepted by any State in which pleuro-pneumonia or other infectious or contagious diseases are declared to exist, and whenever the Governor of the State, or the other properly constituted authorities, signify a readiness to cooperate for the extinction of any contagious or infectious disease, the Commissioner of Agriculture is authorized to expend so much of the appropriation as is necessary in the investigation of the facts as to the disease, in paying for animals deemed necessary to slaughter, and in such disinfection and other means necessary to stamp out the disease; and whenever a State, in any section of which contagious or infectious disease exists, which the Commissioner of Agriculture has declared dangerous to the animal industries of the nation, fails to make provision for its extinction, or co-operate with the plans of the Commissioner of Agriculture for the extinction of the disease, the President of the United States, on presentation of the facts by the Commissioner of Agriculture, shall be authorized to declare said State, or such part of said State as is dangerous to the animal interest of the country, in quarantine, and prohibit the exportation of cattle out of said State or district.
- Sec. 6. Provides for the effectual stamping out of the disease in the District of Columbia.

- Sec. 7. That no railroad company within the United States whose road forms any part of a line of road from one State or Territory to another, or the owners or masters of any steam, sailing or other vessel shall receive for transportation or transport from one State or Territory to another any live cattle affected by any contagious or infectious disease, and especially the disease known as contagious pleuro-pneumonia, or lung plague; nor shall any person, company, or corporation deliver for such transportation to any railroad company or master or owner of any vessel, any live cattle knowing them to be affected by any contagious or infectious disease; or any person, company, or corporation drive on foot or transport by private conveyance from one State or Territory to another, any live cattle, knowing them to be affected by any contagious or infectious disease, especially contagious pleuro-pneumonia or lung plague.
- Sec. 8. It shall be the duty of the Commissioner of Ariculture to notify the proper officials or agents of any railroad, steamboat, or other transportation company doing business in any infected locality of the existence of said contagion, and the person or persons operating such railroad, or the master or owner of any vessel, or owner, custodian, or person having control of such cattle or live stock within the affected districts who shall knowingly violate the provisions of Sec. 7 of this act shall be guilty of a misdemeanor, and on conviction punished by a fine of not less than \$1,000 nor more than \$5,000, or imprisonment for not more than one year, or both fine and imprisonment, and if any such railroad, steamboat, or other transportation company shall after having received such notice, violate the provisions of the act, such action shall be *prima facie* evidence of wilful disregard of the provision of the act.
- Sec. 9. It shall be the duty of the several United States District Attorneys to prosecute all violations of the act brought to their notice by any person making complaints; and the same shall be heard by any District Court of the United States holden within the district in which the violation of the act is committed or the person or corporation resides or carries on or has a place of business.
- Sec. 10. That the sum of \$500,000 or so much thereof as is necessary, be appropriated to carry into effect the provision of the act.
  - SEC. 11. This act shall take effect and be in force from and after its passage.

The laws of Rhode Island are believed to be competent for the restriction and extirpation of either the foot and mouth disease, or pleuro-pneumonia whenever introduced into the State, and early notice of the occurrence of either to the Secretary of the Board, will greatly lessen the expense and shorten the time needed to stamp out of existence either one or both.

It may be stated that the Public Statutes would permit, or even require the enforcement on the part of the State Board of Health, of the following measures in case of an invasion of the lung plague or pleuro-pneumonia within the borders of the State:

1st. That all cattle brought into the State infected or with infected animals shall be immediately slaughtered.

- 2d. That all the premises occupied by such animals shall, after slaughter of the animals, be disinfected as effectually as possible.
- 3d. That inspection of all cattle in stables, herds, slaughter houses, &c., in the vicinity be made as frequently as may be required to detect any threatened secondary outbreak.
- 4th. To have all suspected cattle appraised, so that owners may be indemnified for loss.
- 5th. To prosecute with vigor transgressors of the law, and for disobedience of the orders of the State Board of Health.

It should be observed in conclusion, that during the last five years very great interest has been manifested in the investigation of diseases of domestic animals, and especially those of a contagious and infectious character, and very great advances made in a knowledge of their causes, modes of communication and pathological conditions.

Protective inoculation for the prevention of anthrax or splenic fever, contagious pleuro-pneumonia, and some other infectious and highly contagious diseases among domestic animals, by means of the virus of the respective diseases, has been practiced in several European countries for many years with fairly good results.

The more recent discovery of microscopical organisms in the infecting fluids or virus of several of the more virulent diseases, and the fact that these organisms introduced into healthy animals, each produced its special form of disease, and that these micro-organisms can by cultivation in various media, and in the presence of oxygen, heat and some other disinfecta, become so alternated or weakened that they produce by inoculation only modified or mild forms of the several diseases, which are a substitute and protection against the severer and more dangerous forms, as vaccination protects from small pox, open up a wide field of research and investigation, which presents a promise of very great benefit in the future to stock owners and consumers of meat.



# INSPECTION OF SUMMER HOTELS, IN RHODE ISLAND.

ву

CHARLES H. FISHER, M. D.,

SECRETARY OF THE STATE BOARD OF HEALTH.



# INSPECTION OF SUMMER HOTELS.

Rhode Island has deservedly a more than national reputation for the superior excellence and large number, in proportion to its territorial dimensions, of its places for summer resort. The attractions are varied and unique.

Upon the borders of some, the waters of the ocean directly dash, and the rumble and roar from sea-girt wall and breakers are never absent. Fine beaches are found in ample number and extent, where the sea sweeps inland beyond the breakers, or between the elevations of walls of rock or bluffs of sand.

But it is not alone that directly upon the broad ocean the attractive spots are found. The broad Atlantic sweeping inland, sends cooling and healthful tides swiftly through the Narragansett Bay and Seaconnet Channel far up and into the several rivers, that mingle their fresh waters with the advancing tide waters of the salt sea. Nearly the whole length of the eastern boundary of the State, furnishes localities upon, or in the near vicinity of tide water, which are unsurpassed for quiet beauty and picturesqueness of scenery, and salubrity of the summer atmosphere.

These facts are occasions of just pride to the citizens of the State, and it should be a matter of public concern that nothing should exist or occur, if reasonably preventable, which might destroy or mar the value of these localities for summer habitation, or lessen the reputation already established and still increasing.

And this, not simply because of the honor, but because of the profit to be derived from the large influx of visitors and their residence during the summer months.

Their presence necessitates the employment of some thousands of persons in various capacities, making a home market for the products of the soil and stock yard, fresh and pure, quickening the activities of trade and enlarging the channels of transportation and exchange of the various necessaries, commodities and luxuries of life. In this

way the summer resorts have become established, and by reasonable care can be made to steadily increase, as sources of revenue to the citizens of the State.

In view of the appalling disasters, causing large loss of life and bodily injuries of survivors, occasioned by the destruction of hotels by fire in a number of places of summer resort in other States, and in which hotels the means of escape were exceedingly inefficient; and the not infrequent occurrence of serious sickness in some places of summer resort, occasioned by defective house drainage, unsanitary surroundings or use of impure water, and the possibility that the honor and pecuniary interests of citizens of the State might suffer from like causes and in like manner, prompted the State Board of Health at the quarterly meeting in April, 1883, to order a sanitary examination, by the Secretary of the Board, of the hotels and larger boarding houses at several of the most prominent places of summer resort in Rhode Island.

A brief statement of the results of such examination is herewith appended, as reported to the Board.

## NARRAGANSETT PIER.

Arrived July 31. First made a tour of the village and precincts, to ascertain its topographical characteristics, and as far as possible, the character of the soil, sub-soil and underlying strata. The main street, Ocean avenue, is immediately on the shore line and elevated from five to ten feet above the ordinary high water line. The land rises gradually landward fifteen or sixteen hundred feet from the shore, and reaches an elevation back of the village of from twenty to forty feet. This elevation is a boundary on the east of an extensive basin of swale land, with an understratum of clay and naturally retentive of water, and thickly overgrown with briers, alders and numerous other aquatic shrubs. Water would remain above ground, probably, through the summer, were it not that thorough drainage is secured by ditches of from two to four feet deep running each way at right angles and all emptying into a central open drain, which carries the water into a smaller swamp and thence to the sea.

The soil of the swale seems to be a clayey and silicious loam, and the sub-soil above the stratum of clay is composed of gravelly and sandy strata of uneven thickness. This basin is largely the recipient of collection of the fresh water used at the Pier. The surfaces of the surrounding land are almost wholly covered by vegetation, the soil is free from harmful earthy or mineral constituents, and it may be said that the whole area of the collecting surface of the fresh water used at the Pier is free from any amount of contaminating material, and that the character of the earthy matter through which it passes forms as effectual a natural filter as can readily be found. The dip of the deep stratum of clay is toward the hotels and the sea. The dip, also, of the underlying rock formation is evidently in the same direction.

## SOUTHERN HOTEL.

Four years previous to date, the premises connected with this house were examined by the Secretary, and the sanitary conditions were found quite defective. The parties then in possession left the premises not long after and the ownership was changed.

With the change of ownership, came a very complete renovation and improvement in the sanitary arrangements.

Water for the house is obtained from a well eighteen feet in depth, protected from percolating drainage of foul water, and showing qualities of good water. A second well, formerly condemned because of slops standing in puddles near the well, (but not for the last three years,) furnishes water which is used for washing only.

There is no inside drainage except from the sink, all slops and soil water are carried out by hand, and turned into the town sewer that carries it to the sea. The sink pipe, with a simple bend for a trap, carries the waste water to a drain pipe sixteen inches square, made of chestnut plank, planed inside, and reaching the town sewer about thirty feet away, and of sufficient inclination to give the wash a fairly rapid flow.

The town sewer is a stone drain about two and one-half feet square, with openings for the admission of storm water by surface drainage.

Water closets located at some distance from the house, the contents of the vault removed every day, absorbents, ashes and dry sand, thrown upon the contents of the vault frequently through the day. No perceptible odor, and seats and floors tidy. All house refuse and garbage carried off the premises daily, and none allowed to be thrown on surrounding grounds.

An open drain or ditch running to the town sewer, intercepts whatever drainage may occur on account of storm water or otherwise, from a large stable fifty or sixty feet from the hotel yard.

# MOUNT HOPE HOUSE.

This house has a large open well or reservoir beneath the house, properly protected, water very clear and transparent, brought in pipes from what is called a spring near the boundary of the basin previously described, and if originally there was a natural spring, the capacity has evidently been largely increased by excavation. The reservoir under the house supplies good water for all purposes.

The water is raised by a force pump into a large tank in the attic, which receives constantly a supply sufficient for all the floors beneath, to which it is carried by pipes to faucets in every story, and to the water closets on first and second floors.

Drainage to the sea is secured by a six-inch calibre iron pipe discharging beneath low tide.

Slop hoppers in every story, pan water closets, sinks and all outlets have trapped pipes, and outside traps have ventilating flues.

Outside surroundings perfectly clean, all refuse from the kitchen kept in barrels and removed twice daily.

The house provides for safe escape in case of fire, by stairways in different parts of each story, by one iron coil ladder and other ladders of different lengths.

For prevention of fire, there are Babcock's extinguishers and hydrants on every floor. Gas is used for illumination.

#### CONTINENTAL HOTEL.

Water obtained from a large well about twelve feet deep, thirty-five or forty rods in rear of the house, brought by conduit to the premises, and pumped into a tank in the attic for supplying the rooms.

Water closets well ventilated, soil pipes trapped, main sewer of sixinch iron pipe to point of emergence beyond Ocean avenue, thence a covered wooden trough to below low water mark in the sea.

House well ventilated, outside premises kept in best of order, all decomposing material removed daily or oftener.

This house does not afford entirely safe exit from all parts in case of fire, by means of sufficient stairways or outside facilities attached to the house. Reliance, however, may be placed upon a probable sufficiency of ladders.

House is lighted with kerosene oil, and the appointments otherwise than as previously stated are of the first class.

#### REVERE HOUSE.

Potable water for the house obtained from wells, carried into the house by hand and a kitchen pump.

Sink pipe to main drain trapped, slop water from rooms poured into a hopper in the main drain outside of house.

The main drain, a large sewer from rear of the house to the sea, cemented and covered. Thoroughly repaired in 1883. Such a sewer for the carriage of waste water is much less efficient than an iron pipe of six or even four inches in diameter.

Gentlemen's closets outside of house, at proper distance, and ladies' closets, in an annex of the house, well ventilated; all are dry vault closets and contents deodorized by dry ashes or dry earth, and wholly removed daily.

Cistern water used for laundry and floor washing, and sometimes for flushing the sewer.

Means of escape in case of fire provided by ladders and central stairways in the house.

#### ATWOOD HOUSE.

Water for general use, obtained from wells outside, is carried into the rooms, except kitchen, by hand, and all slops and wash water brought out in the same way, except from sink, which has a pipe to the main drain, into which drain all the waste water is thrown. Main drain of cement pipe to the shore bank, thence a wooden drain to below low tide mark.

There is also an open drain or ditch for carriage of surface or storm water away from the premises.

Water closets all outside, reached by latticed walks and well ventilated. All are vaulted closets, contents kept deodorized and removed daily. Kerosene oil used for lighting.

Ample exit by means of ladders if needed.

#### ATLANTIC HOUSE.

Large house of three stories, two large deep wells, three cisterns. Tanks for water on different floors, filled by pumps.

Water closets in annex, well ventilated, with trapped soil pipes to main drain. Main drain of good sized earthern pipe to point of

emergence on the shore bank, where it is connected with a square wooden pipe which runs farther toward the sea, but does not reach low water mark, is defective at the joints and by leaking occasions a diffusion of foul sewer gas which greatly annoys the neighboring residents. It has been reported as a nuisance.

More numerous stairways or other conveniences are needed to secure the best means of escape in case of fire. No ladders on the premises.

House illuminated with kerosene.

# MATHEWSON HOUSE.

This house is supplied with fresh water from a so-called spring, brought in an iron pipe about two thousand feet to a cemented cistern or reservoir, from whence it is raised by steam pumps to two tanks at the top of the house.

There is also a separate tank on the upper floor, into which sea water is raised, also by steam power, for flushing the water closets and soil pipes.

Water closet apartments on three floors, well ventilated. Pan closets, ventilated by pipes from the closet bowls into the kitchen flue, soil pipes trapped, and the main pipe of the house running above the roof for ventilation of main drain.

Waste water pipes from kitchen and laundry, trapped, and traps ventilated into fire flues. Main drains of house are earthern pipes, leading to iron sewer pipe which reaches to the sea under low water mark.

There are numerous stairways in the house, and canvas fire escapes and long ladders are provided on the premises.

#### NARRAGANSETT HOTEL.

This is one of the first houses built at the Pier. Has a well of good water and a cistern. Cistern used for washing only.

Water from well carried in by hand. Pumps in kitchen from cistern.

All waste water carried to the sea by sewer pipe. Sink pipe not trapped.

Water closets at some distance from the house; contents of vaults frequently removed.

The house is small and well supplied with ladders.

#### MC'SPARRAN HOUSE.

This house is built directly upon the edge of the sea.

The fresh water for domestic purposes is obtained from a deep well dug and cut through sand, clay and rock. The water is raised by steam pump to tanks in the attic; there are water faucets and slop hoppers on every floor, the waste pipes of hoppers are trapped.

Water closets on four floors, well ventilated. Pan closet fixtures, ventilated from the bowl, soil pipes trapped, and main soil pipe four-inch calibre from sewer in the ground to above the roof, ventilation at the top. Main sewer, six-inch iron pipe to sea beneath low tide.

Waste pipes of kitchen and laundry are trapped. Water closets flushed from tanks.

There is a three-inch iron pipe reaching from the sea to hydrants in different stories, worked by steam power, and two sets of hose on each sleeping floor, through which water can be thrown into every sleeping room, hall and stairway, and into the elevator. Iron fire escapes attached externally on the four sides of the house.

Illumination by gas throughout the building.

#### PIER COTTAGE.

This house is a dormitory annex to the McSparran, and has the same water supply and general arrangement of house fixtures.

#### DELEVAN HOUSE.

Water supply from two wells, thrown into tank on top of the house by force pump, pipes to lower rooms, faucet and hopper in one hall.

Water closets in annex, reached by short latticed walks from basement and first story, closets have vaults, contents of vaults designed to be kept deodorized and entirely removed every day. Closets not free from bad odor, and should have more attention.

Drainage from the house through pipes to a receiving cesspool in close proximity, thence to a second and larger covered cesspool at considerable distance. These cesspools receive kitchen and laundry waste water, and all slop water from sleeping rooms. Protection from unhealthy gases not well secured.

Jet and piazza roofs afford fair means of escape in case of fire. Kerosene oil used for illumination.

#### METATOXET HOUSE.

The supply of water comes from two deep wells, from which water is carried to a tank by force pump, and from tank to sleeping rooms by pipes and faucets.

Water closets in annex, well ventilated, have vaults, and contents of vaults deodorized and removed daily. Urinals in lower story, apartment well ventilated and clean, and no unpleasant odor perceptible.

Kitchen and sink slops and also urinal excretæ, run in waste pipes to drain pipe and thence to a large covered cesspool several rods from the house.

There is a large cistern with a force pump attached and two hundred feet of hose, by which the eistern water can be thrown into the attic rooms. Building three stories, stairways in the centre and at ends of wings. Plenty of ladders, and fire watchman at night. Coal oil used for lighting.

#### MASSASOIT HOUSE.

Cistern water used for cooking and drinking and other purposes. Cistern large, has a brick filtering partition, water pumped to tank in the attic from which pipes lead to every floor, and faucets on every floor. There is also a well, the water from which could not be recommended for table use, and is used for washing only.

Waste water from kitchen through trapped pipe to a grease tank, thence to main drain.

Wash water from sleeping rooms is run through filtering hoppers and carried by trapped and ventilated pipes to a cistern with cemented sides, at some distance from the house.

Water closets in annex, thoroughly ventilated, soil pipes trapped. The main drain, earthen pipe to the shore, thence wooden pipe under the sea.

Coal oil and candles used for illumination.

Stairways in the centre and rear of wings or ells.

One wrought iron fire escape, reaching to the attic. Fire watchman at night.

#### ELMWOOD HOUSE.

Potable water from deep well, open bucket and endless chain. Carried into the house by hand.

There is a cistern from which water is pumped to each story for washing purposes.

No house drain above first story; all wash water and slops carried out by hand to filtering hopper in main drain.

Kitchen slops carried also to outside hopper, and trapped sink pipes run to main drain.

Water closets in annex, good ventilation, are frequently flushed with copperas water, but need more attention.

Coal oil used for lighting. Plenty of ladders.

#### HOTEL COLUMBUS.

Large well, water raised by pumps to basement and second story. Tank for supplying wash bowls on sleeping floors. Drainage by trapped pipe to main sewer.

Laundry and sink waste water pipes all trapped and running to main sewer.

Water closets in annex, good ventilation, cemented vaults, contents deodorized and proper removal secured.

Main sewer of stone, cemented all the way to the sea.

Coal oil used for lighting.

Force pump outside with hose which carries water to the second story.

Central stairways. No ladders on the premises.

#### OCEAN HOUSE.

Large well supplies potable water. Three cisterns, from which water is raised by pumps to tank on roof or top of the house by wind power. From the tank washing water is supplied each story by pipes and faucets.

Water closets in annex, ventilated by fans run by wind power, night soil promptly carried away.

Main sewer, earthen pipe to covered cesspool two hundred and fifty feet distant from well and house.

Stairways ample. Some ladders on the premises.

Coal oil and candles used for illuminating.

#### GENERAL OBSERVATIONS.

It was remarked in effect on a preceding page, that the collecting surface of the fresh water used at Narragansett Pier, was remarkably free from material which could in any way contaminate the water, and that the earthy strata through which it percolated, afforded as effectual a natural filter, if such filter was of advantage, as could be expected in any locality, and that, therefore, all the fresh water from wells at that place should be of the best quality.

An examination of several samples from different wells at the Pier, has shown that such is the fact. And the fact should continue indefinitely, and will, unless by carelessness in allowing heaps of organic material to decompose in the vicinity of the wells, or by a multiplication of cesspools, or long continuance of those now in existence.

Although the cesspools are not the recipients of water closet material, they nevertheless are the recipients of large amounts of organic matter in solution or held in suspension in the waste water, emanating from the kitchen sink, the laundry, the slop hoppers indoors and outdoors, particles of animal and vegetable refuse in a state of decomposition, and in such minute subdivision as to allow of being carried through the bed of the cesspools, and not only descending perpendicularly, but also spreading laterally to considerable distances, and increasing the area from year to year.

It is true the deleterious properties of the products of decomposition are considerably modified by the constituents of the earthy strata which they reach, but they may be poisonous, nevertheless, and while the more volatile products find their way upward to the more free atmosphere, the liquids of the earth charged with the heavier products and holding some harmful gases, travel along through the sand or gravel or upon strata of clay or rock bed, toward some spot or opening where it can more rapidly find a lower level.

Wells furnish just such openings, and toward them tend the liquids in the surrounding earth, ordinarily in gravel for distances equal to the depth of the well, but where beds of clay or rock are found of less distance from the upper surface of the earth than the bottom of the wells, and with an inclination of either toward the wells, the distanced traveled by water, good or bad, may be very large.

It will be obvious, then, in what way cesspools with leaching bottoms may greatly endanger the purity of water in wells within the reach of their drainage.

In regard to the occurrence of fire, it may be said in a general way, that the danger to life from such occurrence in any hostelry at Narragansett Pier is exceedingly small. Even in those dormitories where stairways may be inadequate, the numerous balconies and piazza roofs and roofs of lower stories, and on premises where there are no ladders,

the near proximity to other premises where ladders in abundance and of all suitable lengths can be had, would seem to furnish adequate means of escape should fires occur.

It can be said with entire truth, than in regard to general cleanliness of premises, lawns, front yards and back yards, around kitchens and in basements, everywhere in fact, Narragansett Pier is not excelled and seldom equalled by any place of summer resort for the general public, between the Maritime Provinces and Chesapeake Bay. Farther the writer cannot speak from personal knowledge, but it is probable that the Pier is not excelled anywhere, and cannot be within reasonable expense.

The servants closets are in most cases entirely apart from those of the guests, and usually are vault closets and at considerable distance from the house, but the same care is generally given to deodorization and daily removal of contents.

# WATCH HILL AND ITS HOTELS.

The water collecting surface of Watch Hill is so nearly entirely free from any contaminating material whatever, that the well water should be of the best quality, and such it is found to be, except where the well is in the immediate vicinity of the sea or low ponds near the sea, and is impregnated to some extent with the percolation of one or both.

Cistern rain water is, however, used quite largely in some of the hotels, and if properly filtered is equally pure and healthful.

There is no location in this, or any other State or country, where thorough and safe drainage for summer hotels can be more effectually and cheaply secured than at Watch Hill. Cesspools are an abomination, and must sooner or later contaminate to a greater or less extent the surrounding earth, reaching the sources or tracks of moving water in the deeper earth, and in that manner pollute wells or springs at a considerable distance away, and also cause evolution of the gases of decomposition, which find their way to the atmosphere above the surface of the ground.

It would seem that the existence of cesspools could have no reasonable excuse.

Some of the houses at Watch Hill lack efficient traps to waste water pipes, and ventilation of pipes is not always secured. It may be said,

however, that this deficiency applies almost wholly to kitchens and other work rooms which are open the greater portion of the day, and that the inflow of the gases of decay is not confined in close rooms, but meeting with the free currents of the air, are rapidly diluted and carried away, and no real harm results.

No parlors, porticos or sleeping rooms were found to which dangerous gases could find access.

Danger to life from the destruction by fire of any hotel at Watch Hill could scarcely occur, except from gross neglect, ignorance or physical disability.

The near proximity of the various houses by which sufficient help could be secured, the large number of ladders of sufficient length, and some portable fire escapes, would seem to settle that question bevond dispute.

# OCEAN HOUSE.

This house is largely supplied from a cistern beneath the building, which collects rain water from the roofs, and gives it efficient filtration for the present, by means of a brick partition separating the receiving portion of the cistern from that of the supply portion, and furnishing good water. There is also a well belonging to the premises, about two hundred feet from the tide line and fifteen feet in depth, from which water is taken for domestic purposes.

Water is raised from the cistern by pump to the third story, and the different rooms supplied thereby.

Water closets in an annex, ventilation good, the soil pipes are trapped inside of the annex and near the main drain.

Sink and slop water pipes are trapped near the main drain or sewer, which runs to a covered cesspool at a distance from the house.

It is stated that the proprietors will, at the end of the season, discard the cesspool and carry the main drain below low water mark in the sea.

Stairways in centre of the main building and in the north wing. Watchman at night.

#### LARKIN HOUSE.

House supply of water from two wells and large cistern. Well water fair, cistern water filtered and of good quality.

Pump on second floor. Wash water for sleeping rooms carried up by hand and slops brought down same way, and all waste water turned into a strainer hopper connected with main drain.

Main drain to covered cesspool, all pipes to main drain trapped.

Men's retiring closets, with vaults, at a distance from the house. Ladies' closets in an annex to second story, also with vaults. Ventilation of all the closets good. Contents of vaults deodorized and removed daily.

No ladders on the premises. No stairways in one wing. Main stairways in the central portion of the house, and also stairs in the rear of the central portion. House three stories and attic. Not well provided with means of escape in case of fire.

Ventilation good throughout. Gas used for illumination.

# WATCH HILL HOUSE.

Has one well and three cisterns. The well is at a considerable distance from the house and the water is raised to a cistern at the house by an air engine. Well water fair. Cistern water from the roofs, filtered through charcoal for drinking. Filter should be renewed.

Water is pumped to a tank in the third story for supply of sleeping rooms.

Annex of three stories for water closets, reached by ventilated passages. A common vault at the surface of the ground for each story. Contents of the vault not well deodorized, but said to be removed daily.

Kitchen slops and all waste water drained from sink and slop hopper pipes to cesspool not far from the house. No pipes trapped.

Ample means of escape from fire by stairways in all parts of the house except in one wing. In that wing a canvas fire escape is provided.

The house is defective in preventing the inflow of gases from the cesspool, and in care of the water closets.

#### ATLANTIC HOUSE.

The water supply of this hotel is furnished by two cisterns, of 3600 gallons and 36,000 gallons, respectively. The smaller cistern is used for washing only, the larger having an efficient filter, is used for drinking, cooking and any other purpose.

Water is raised by pumps to kitchen, laundry and first story, and carried by hand to the stories above.

House is drained by glazed earthern pipe, which by rapid descent empties into a closed cesspool two hundred feet away. Waste waters from sinks, laundry and chamber slop hoppers, are carried by pipes to the general drain. Ventilation from the waste pipes secured. No traps.

Water closets in annex attached to the house, with a ventilated corridor between, separate apartments for the sexes. The excretæ fall into a zinc lined trough, leading to a large soil drain and thence to cesspool, as stated above. The soil trough is flushed and rinsed daily or oftener.

Stairways front and rear. No ladders. Pails of water kept constantly in each story, except attic. Watchman at night, and halls kept lighted.

# NARRAGANSETT HOUSE.

Water for drinking and cooking purposes obtained from a well of considerable depth, said to have been originally the source of a natural spring. This, however, would make the water neither better nor worse. The water shows no sign of impurity.

Cistern rain water used for all purposes except for cooking and drinking.

A large wooden drain, planed inside, eight inches square, thirtyeight feet long, carries all waste water from sink and laundry out upon the surface of the ground, forty feet or so below and away from the house. This overflow on the surface is too near the well for entire safety.

An earthen drain is also in use to carry chamber waste and soiled slops farther away and beyond harm to health of guests.

Water closets at a distance from the house, are vault closets and well ventilated. Contents deodorized and disinfected daily, and removed every three weeks. Should be removed daily.

Danger to life from occurrence of fire not serious, because of stairways and size of house.

# PLIMPTON HOUSE.

The water used at this house is of excellent quality, brought in lead pipes from an excavation in the hillside, the site of a natural spring, one thousand feet away, by a force pump.

The water is raised to a tank in the second story, and also again to the third story. It is used for all purposes, and faucets and pipes are found on every floor.

Drainage is provided by an ample sewer emptying below low water mark in the sea, to which all kitchen, laundry and chamber slop hopper pipes lead. All waste pipes trapped. No grease tank.

Ladies' water closets in annex separate from the house, connected by latticed platform, ventilation good. Gentlemen's closets beneath the house, not so well ventilated.

The separate chutes connected with each closet seat should be removed, as they can never be otherwise than foul. The excrete should have free fall.

Stairways and ladders ample for escape in case of fire. Watchman at night.

# DICKENS HOUSE.

All potable water from the same source as the Plimpton House.

No cooking or laundry work at this house. Used only as a dormitory for guests of Plimpton House. Water for lavatory use supplied by a cistern on the premises. No sewer or drain pipe. Waste water carried some distance from the house and thrown upon the surface of the ground.

Water closet small, well ventilated. Contents of vault deodorized by dry earth or ashes, and removed daily.

Means of escape from fire in the house all sufficient.

#### BAY VIEW HOUSE,

This house is also an adjunct of the Plimpton House, and used for the same purpose as the Dickens House, and the water supply and other arrangements are on the same general plan.

# BLOCK ISLAND.

That portion of Block Island in the vicinity of the harbor affords very favorable locations for the purposes of summer hotels. The land rises somewhat abruptly back from the steamboat landing to the different eminences and small plateaus upon which are located the larger hotels, thus affording facilities for effectual drainage of those premises, while those hotels situated more directly upon the sea shore, although not occupying positions so elevated as the first named, are still high enough above the level of the sea to afford them also satisfactory drainage at very small expense.

The surface of the land in the neighborhood of the hotels is exceedingly uneven, a rapid succession of elevations and depressions of quite limited extent, many of the depressions becoming reservoirs of rain water, with compact peaty bottoms, and some of these ponds not only receiving the surface drainage of rain water, but also fed by springs visible or invisible, some of them slowly pervious to the passage of water, holding their contents in storage for several weeks or months.

The collecting water surface of this section is fairly free from material which might contaminate the water of springs or wells, and whatever of such material as may be found in the ponds or elsewhere, the peculiar constituents of the deeper earth beneath afford a natural disinfecting filter, which would scarcely fail to render the water entirely wholesome and good.

In reporting the results of the inspection of the hotels, it is not designed to give any extended description of them, but, as in previous reports of examinations of other summer resorts, to describe such conditions of the premises, such appurtenances and appointments, such methods of use and plans and modes of management, as have relation, directly or indirectly, to the best health and safety of life of the occupants domiciled therein.

#### MANISSES HOUSE.

The drinking water of this house is brought in buckets from a spring and is of good quality. Reservoir or pond water used for lavatory and general purposes. The source higher than the house, and water can be drawn from faucets on every floor. Hydrants also on

every floor, connected with stand pipes supplied by water from Sunset pond, with thirty feet of hose attached to each.

Water closets in two stories, and lavatories on each floor, with pipes to upright three-inch iron soil pipe, extending from the sewer at the base of the house to above the roof, giving ventilation to soil pipe and sewer.

Urinals on the lower floor, with trapped pipes to the main perpendicular pipe. Waste water from sleeping rooms and kitchen and laundry also carried in trapped pipes to the sewer.

Sewer pipe, glazed earthen, receiving all wash and excretæ, running to the sea under low water mark.

All garbage, house offal, &c., carried away from the premises daily.\* Stairways to halls in front portion of house only. Reliance in case of fire upon the hydrants and hose pipe, and upon ladders from Ocean View House, which is under the same management. Fire escapes should be added.

#### ADRIAN HOUSE.

Potable water from a well, also from cistern having a filter. Second cistern on adjoining premises, unfiltered water for general use. Carried in buckets to house and sleeping rooms. Waste water thrown upon the surface of the ground away from the house.

Water closets outside and some distance away from the house. Contents of vault said to be limed every day; not frequently removed; premises somewhat offensive from accumulation in the vault and lack of deodorization.

Cesspool for soil water treated with dry loam daily.

Escape in case of fire, ample.

#### OCEAN VIEW HOTEL.

This is one of the most extensive and best equipped summer hotels in the country.

The drinking water is obtained from a well two hundred feet away, and brought to the house in cedar pails as wanted for use, the storage of same, for a few hours only, in zinc lined tanks and nearly exhausted at every meal. There are also two other wells and a large cistern.

<sup>\*</sup>This disposition of all refuse material, accumulating from day to day of whatever kind, is the custom of all the hotels, and need not be mentioned in connection with every one.

Water for general purposes is also obtained from Continental or Sunset pond, and by means of hydrants and hose can be made available in the extinguishment of fire on every floor.

Large tanks in every story supply water for the sleeping rooms and for flushing the water closets. The water closets, connected, are of modern construction and kept cleanly and free from unpleasant odor.

Drainage is secured by trapped waste water and soil pipes to main sewer of five-inch iron pipe, running a considerable distance into the sea beneath low water mark. Good ventilation of the same is also secured.

In addition to hydrants and hose for the prevention of fire, there are pails of standing water constantly in every story, numbering nearly two hundred, and Babcock's fire extinguishers in each of the larger halls. The hotel also claims a drilled fire department.

While the stairways of the house are hardly co-extensive with the whole structure, the means of escape by other ways, in case of fire, are so ample as to preclude all scarcely possible danger to life. There are, however, stairs at the end of the wings, as well as at the centre of the building, and piazza roofs and long jets surround the house, and numerous long ladders are found on the premises.

Gas is used for illumination in every part of the house.

# OCEAN VIEW COTTAGE.

This house is an annex to the Ocean View Hotel, and the same arrangements and appointments are found as were described as existing there.

# THE SPRING HOUSE.

This hotel is, like the Ocean View, one of the first class of summer hotels in every respect. Though not the most extensive, it is still one of the larger and better class of New England hotels, and its appointments are quite complete.

The water supply is obtained from a natural spring having a copious flow, and is raised by a hydraulic ram, and a small steam pump when needed, to large tanks in the attics, from which every floor and room in the house are supplied.

A sewer of ample dimensions carries all the waste water of all kinds from the premises out below the bluffs or sea bank, and thence by open trench to the sea. An extension of the sewer into the sea below the lowest tide level would avoid danger of obstruction in the open

conduit, and consequent decomposition of entangled refuse and excretæ and the evolution of foul gases. In the

### SPRING HOUSE ANNEX

are water closets of approved construction, (although pan closet fixtures are less desirable than the hopper closet form,) and the bowls are thoroughly flushed through pipes from the attic. Lavatories are ample on all the premises, and all waste and soil pipes trapped and ventilation secured.

Stairways, piazza roofs and plenty of ladders, provide means of escape in case of fire.

#### CONNECTICUT HOUSE.

Good well water for drinking. Cistern for general purposes. One cistern has a filter, and water used in cooking. Cistern water pumped to second story in large tank, supplying sleeping rooms, &c.

Drainage by sewer running to cesspool seventy-five feet distant from the house. Sink and other waste pipes trapped, and connected with the sewer; also outside hopper, with strainer, connected with sewer.

Water closets outside and away from the house. Have vaults and are ventilated. Vault contents deodorized by lime and ashes daily, and removed frequently.

There are flights of stairs in the front and rear.

### HIGHLAND HOUSE.

Water from large, deep well, good. Also, two cisterns for lavatory and general use.

Two house drains to cesspools away from the house. Slop hopper in the second story with waste pipe connected with a drain running to cesspool.

Water closets fifty feet away from the house, are open vault closets. Contents of vaults removed frequently.

Stairways at each end of the house.

### NORWICH HOUSE.

Water for drinking and cooking obtained from the well at the Highland House. Cistern water for general purposes.

Drain to cesspool. Sink and slop water pipes to drain, untrapped. Water closets forty feet from the house. Contents of vaults frequently removed.

Two sets stairways; house small.

### NARRAGANSET HOUSE.

Good cistern water, filtered, used for drinking and other purposes. Also, well under the building, used for washing only.

Drainage by an efficient sewer to the sea under low tide level.

Slop hopper for chamber wastes, with trapped pipe to sewer. Sink and other waste water pipes to sewer, also trapped.

Water closets are vault privies, away from the house. Contents of

vaults deodorized daily, and entirely removed frequently.

Stairways and other facilities for escape in case of fire insufficient. It is stated that ample provision for such an occurrence will be made for the next season.

### WOONSOCKET HOUSE.

Well water for drinking. Cistern water unfiltered for washing.

Drainage by sewer to a pond some distance away. Chamber slops and waste water from kitchen and laundry by pipes to sewer. No pipes trapped.

Vaulted retiring closets, away from the house. Contents of vaults sprinkled with ashes, and frequently removed and vault cleaned.

Provision against danger to life from occurrence of fire ample, by means of stairways and ladders.

### PEQUOT HOUSE.

Drinking water brought from a spring back in the hills. Cistern water in abundance for general use. Cistern water filtered, also used in cooking.

Drainage by ample sewer to the sea. Slop hopper with strainer, outside of house, directly connected with the sewer, for all waste and slop water except from sink. Sink pipe not trapped.

Water closets in detached building, and connected with the sewer. Good ventilation, but needs frequent flushing.

Stairways hardly sufficient for entire safety in case of fire. No ladders on the premises.

### CENTRAL HOTEL.

Filtered cistern water for drinking and general use.

Drain from sink to a cesspool some distance from the house. Sink pipe trapped. Slops from sleeping rooms carried away from the house and thrown upon the surface of the ground.

Vault privy closets at sufficient distance from the house. Contents of vault deodorized and frequently removed.

Ladders on the premises and stairs provide for safety from fire.

### NEPTUNE HOUSE.

Good well water for drinking, also filtered cistern water. Water pumped to a large tank for supply of chamber rooms. Faucets for tank water in the second story.

Privy closets sixty feet away from the house.

Better drainage arrangements should be made. Escape from fire well provided for.

#### REMARKS.

There are several other small hotels and boarding houses at Block Island which were examined, located either near, or upon tide water mark, or at some considerable distance back from the shore, of which it may be said in general, that the potable waters in use in them presented no evidence of impurity, and all are undoubtedly wholesome, running in quality from good to best.

In some of the houses more attention should be paid to drainage, and to the daily deodorization of the contents of the privy vaults with perfectly dry loam or dry ashes, keeping them entirely sweet, which can be fully accomplished by entirely dry (not damp) earth or ashes, frequently applied.

For the larger number, the privy closets outside of the houses, have vaults which are simply shallow holes or slight depressions in the ground, and into some of which the rain water from the roofs and surrounding grounds find access, and sinking through the contents of the vaults and into the earth beneath, carry with it some of the foul

material, and so saturating and contaminating all the earthy strata which it reaches. The results are the same as in the case of cesspools, upon which remarks have been previously made.

For the larger number, also, proper attention has been given to general cleanliness of the premises, and all garbage and house refuse promptly removed, leaving the back yards, kitchens and cellars free

from any heaps, or accumulations of decomposing rubbish.

Improvements are made in every direction from year to year, and sanitary appliances and sanitary management are receiving a full measure of attention.

## ASSOCIATED SANITARY EFFORT.

## AN ADDRESS

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CHARLES H. FISHER, M. D.,

SECRETARY OF THE STATE BOARD OF HEALTH.



## ASSOCIATION FOR SANITARY WORK.\*

### Mr. President and Gentlemen:

Upon the card which gave notice of the present meeting, it was announced that I was expected to lead in a discussion upon the subject of "The promotion of the public health."

Now, when I looked upon the sentence, "The promotion of the public health," in clear type, upon clean white paper, it had a very modest and rather attractive aspect. But as the time approached when I was expected to "stand and deliver," the words assumed an imperious aspect and formidable proportions. The subject with all that the term implied seemed like a hostile country to be attacked, and anxious queries arose as to the points where should be made the first assault.

It seemed better, upon consideration, to confine present movements to skirmishing upon the enemy's line, with a view to better ascertainment of the best methods of attack, and better preparation by a more extended examination and a larger following in numbers.

It will be understood, then, that the present suggestions are in the line of skirmishing, and will have more direct relation to the organization of health clubs or sanitary associations.

Are such organizations desirable? If desirable, why? Is it a matter of policy, or expediency or necessity? For what purpose and for what good? These are the questions that the average American of to-day puts to every new proposition. There runs in all the lines of thought the idea or conception of material gain. Within limited bounds it is to be commended.

Let it be accepted that all persons expect some pecuniary benefit or return, direct or indirect, present or prospective, in all his or her projects and labors. The idea, that every dollar that goes out into the known or the unknown, must come back a whole dollar at least, and that at no distant day, and desirably thirty, forty or an hundred

<sup>\*</sup> Extracts from report of an address before a Providence Social Association.

per cent. Not that all persons are fully conscious of such a so-called worldly minded sentiment or desire, but that it does, nevertheless, influence their action; which is not saying that all are selfish in such action, because we know that there are many who act for the benefit of the community in which they live, and in whom true benevolence is the leading motive. But in such cases, there is a pecuniary, a material good to come, sooner or later, to the beneficiary community. There is in the mind of the beneficent individual and. assenting to the noble promptings of the heart, a still, small voice which says, go on, the higher you elevate a community in morals, in intelligence, in general health, the more will their pecuniary advantages be enhanced, the greater their enterprize, the more solid and substantial their prosperity. And thus the deep seated, the hidden, the seemingly silent, the underlying sentiment is gratified and rejoices in the prospect of the return to self or others of the dollar that was cast upon the waters of the public good, and that too, one hundred or two hundred or five hundred fold. But how can such "consummation devoutly to be wished" be brought about in regard to the public health?

It may be assumed, and I think it will not be denied, that the average man and woman are greatly deficient in a knowledge of the means of preserving health and the methods of preventing disease. And this want of knowledge which can be largely supplied, is the cause of incalculable loss to the communities and the State, is the cause of incalculable sorrow and distress because of loved ones lost, is the cause of immense bodily suffering and affliction from sickness, is the cause of poverty, is the cause of unspeakable misery from grim want and despair, is the cause indirectly of vice and crime.

It is believed that scarlatina, which a few years ago desolated and blighted so many homes in this vicinity, and sent more than five hundred to youthful graves, may, by popular knowledge of its nature and mode of propagation, be prevented from becoming epidemic. And so of diphtheria, which has blighted the hopes of thousands in this city, it is believed that too, may be greatly restricted if not eradicated, and thus leave countless mothers rejoicing, instead of following with sorrow and weeping, the remains of dear ones to the resting place of the dead. I have said that want of proper sanitary knowledge was the cause of immense loss to the State.

These remarks will serve to indicate how the State is subjected to great loss, by reason of the want of knowledge of how to preserve health, how to avoid sickness, how to restrict the spread of contagious diseases, and how to care for those already sick. It will be seen how the philanthropist may here rejoice, in the prospect of double benefit, the improvement in public health and public wealth. But how can this want of sanitary knowledge be supplied? It is right here where associated action tells. Has there ever been any worthy public object accomplished without plan, without concerted measures, without organization and coöperation? We have the pulpit, the platform, the public press. But we also need conferences and synods, conventions and committees, and political organizations. To attract public attention there must be agitation. The average citizen will give but little heed to any subject, even if it affects him personally, if also in connection with his interests, are also the interests of his neighbors and the general public, until he is brought up plumply face to face with it, by some zealous individual or by the published or witnessed proceedings of some live organization.

By the formation of sanitary associations, and the discussion of sanitary questions in those societies, by the study and preparation made by members for taking part in the discussions, by the interest acquired from study and consideration and hearing, the members and hearers become a nucleus of sanitary leaven in the community, by which the whole lump may become leavened, and will become leavened more or less in proportion to the vitality of the living ferment, the spirit of the organization.

Whatever kind of knowledge shows a promise of becoming popular, of becoming a common and informal subject of familiar conversation, the average mind will hasten to acquire some knowledge of, and in the matter of hygiene much more to the benefit and credit of the talker, than loose platitudes in relation to atmospheric temperature or the abundance of dust and flies.

But, what is it, the half curious and half incredulous individual will ask, what is it that the public and every single person should know for his own good, and the good of all around him? And away down deep under the moral nature, but not smothered, nor often very still and small, is the voice that makes the inquiry, however inaudible it may be, Is there money in it? Yes, it may be answered, "There's millions in it." But really what are the subjects upon which the popular mind should have larger information? Let us see.

In the first place, individuals should know more about themselves. The apartments of the house of flesh they live in, the reception room, the kitchen, the drain pipes, soil pipes, and sewers. How the body is ventilated and warmed and cleansed. Then the family house, the

ventilation and warming and drainage of that. And these two, though not containing all the law and gospel of sanitation, do comprise, by proper attention, a large proportion of the means of the preservation of health and the prevention of disease. And what should be known in regard to these is not difficult of attainment, and may be acquired by the ordinary mind in no very lengthened period of time with reasonable attention and diligence. But I do not mean to convey the idea, that the subjects or specialties of study are few in number. In ventilation, the constituents of the air, pure and impure, should be known, and the dangers of the latter, and how avoided In food, the kinds and qualities best adapted for all requirements, the action upon it of the fluids of the mouth, the fluids of the stomach, the fluids of the pancreas, and of the intestines, the admixture of bile, and the result of all these, all the changes that food undergoes to fit it for supplying the places of the worn out and disintegrated tissues of the body; a general idea of the circulation of the blood, the use of the lungs, and the function of the nervous system, and then a foundation is laid for a correct understanding of the necessity of sanitary measures which otherwise might not be so well understood.

It is not, however, absolutely necessary that such an amount of physiological knowledge should be known. A knowledge of facts, in their application to hygiene, may be stored in the memory, and a practical use be made of them, without a knowledge of their philosophy, as many a cook adds yeast to dough "to make it rise," or an acid and an alkaline carbonate when preparing her bread for the oven, "to make it light," knowing the fact of the result without knowing the reason why. And so a large part of every population, must be taught facts without the scientific details of cause and effect. And again, what are some of the questions or some of the subjects which every citizen ought to study? Let us see.

Following those that relate to the dwelling and to bodily health we have: The removal of garbage and excretæ and sewage from living premises. The pollution of drinking water. In cisterns, by various products washed from the roof or surface that collects the water. In wells, percolation or flowing direct, from saturation of the soil by leeching privies, cesspools and drains. In rivers, which supply water for our beverages, from the sewage of houses and stables and mills, from the germs of scarlatina, diphtheria, typhoid fever, &c., thrown with the dejections into the gutters or sewers or streams that flow into the rivers. The means of prevention of the inflow of poi-

sonous gases from sink drains, cesspools and sewers, and from foul and wet cellars, by which fatal disease is engendered or general health impaired, leading to organic disease, or so deranging normal functions, and degenerating vital force as to invite many forms of serious or fatal disease, or furnishing directly a crop of diphtheritic germs. The value of disinfection, and cleanliness of indoor and outdoor premises. The dangers of close or crowded sleeping rooms, one of the most prolific causes of pulmonary consumption. The dangers of unsuitable food, unripe fruits and decaying vegetables, which send so many infants and young children to their graves. The means by which contagious diseases may be restricted. Indeed, the questions for consideration having sanitary relations might be almost indefinitely extended, but in considerable measure they have reciprocal relations, and are mutually dependent, and so have less separate entity than the numbers would imply.

We scout Mohammedism, and yet from appearance there exists today in our communities, a sentiment of fatalism so practical and so positive that it would give supreme comfort to the most exacting prophet of Islam. It is the manner in which the average individual looks upon the occurrence of contagious disease. It seems to be settled in the minds of a large proportion of the community, that those diseases are inevitable, that like the winds they come when they list, and it is beyond mortal ken to know from whence they come or whither they go.

Then in regard to the non-contagious diseases, the diseases of common occurrence among the high and the lowly, among the rich and the poor almost alike, the diseases that result from impure air, from improper food and drink, from alternate excitation and depression of the nervous system, by reason of indulgence in stimulants, by worry in business, by attendance at late hours on balls and routs and social parties, by large indulgence in sensational novel reading and number-less other causes in large variety.

In regard to that last class of diseases the general sentiment seems to be hardly less fatalistic. We don't know what is coming, is the popular sentiment, we will make the most of what we have, we will enjoy ourselves while we may, and take our chances. It is the fatalism of heedlessness and recklessness. From all which good Lord deliver us. But the deliverance can come and only come from some coöperative effort of enlightened citizens. We are told, God helps those who help themselves, and that faith without works is vain.

Now if we desire a change in public sentiment, a change in the pre-

vailing sentiment in relation to the occurrence of diseases, there is a work to be done. We have faith that much good can be accomplished, that God favors and blesses the faith that is accompanied by works, and while our faith and our works are of advantage to others, and are of equal advantage to ourselves, we have the strongest inducement to put forth effort that motives can give. And with the blessing of God, human means and human plans must be employed, and fair judgment and discretion exercised to insure fair success. Cromwell enjoined his soldiers to trust God, and keep their powder dry. That was faith and works exemplified.

We believe that in order to improve and confirm individual and general health, and enhance the moral, social and pecuniary condition of individuals and the State, there exists an imperative necessity for a largely increased popular knowledge of hygiene and sanitary law, or of facts connected therewith. We believe that such increased knowledge would largely increase the public health. We believe that increased public health would augment the measure of solid and enduring prosperity, public and private. We believe that it would indirectly, if not directly promote nearly every form of public good. We believe God would bless every effort having so noble an object. But what plan can be devised to accomplish the object?

Suppose an association or club was organized for the purpose, and in working order. Meetings monthly or otherwise were held. These meetings were free to the public, and the public invited to attend. Topics for consideration given out, and two or three persons secured to lead in the discussion. Papers read and addresses made, giving information upon subjects connected with general sanitation, including in the course of time all, or a large part of the questions in relation to hygiene, of the person, of the household, of the premises surrounding, of public premises, etc. With a small admittance fee would not a large membership be secured, and thereby a small per capita tax only required for working expenses. The methods of procedure could be changed or modified, from time to time, as experience might suggest. Special benefits for the members might be devised. Reports of papers and addresses in the public press would reach a large proportion of the population. There are a considerable number of monographs and small volumes, written in popular language, giving information upon many of the kinds of knowledge needed by the people, which could be read at the meetings, or which could be purchased in quantity and sold cheaply to individuals desiring them. Indeed, the whole matter of endeavoring to inform the masses in san-

itary knowledge, need not require complicated methods, although the methods may admit of great variation.

But I suspect I am drawing these remarks out to a wearisome length. It will appear that I strongly advocate the formation of popular organizations for the purposes set forth in the foregoing remarks. I do think they may be promotive of much good. I have brought the subject before this intelligent and representative audience for a candid and deliberate consideration of the matter by the members of the association, and that such action may hereafter be taken as shall be deemed advisable.



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